DATE: May 30, 2000 **Revised 01/02/2003**

TO: Division of Drinking Water Staff

FROM: Joanne Vivas, SDWIS Administrator
Division of Drinking Water

THROUGH: Robert Taylor, P.E., Director
Division of Drinking Water

SUBJECT: SDWIS DATA REPORTS AND RETRIEVAL PROGRAM (R&R)

R&R is a computer application designed to generate reports of information stored in the Safe Drinking Water Information System (SDWIS). This application also serves as a database to store information pertinent to VDH-DDW operations that is not currently stored in SDWIS. Use of the following R&R features is mandatory.

System Data

- Lead Notice Date
- Cross-Conn. Approval Date
- Consent Order Date
- Source Water Assessment Date
- Permit Effective Date
- SSP Approval Date
- Capacity Development Assessment Date

Bacti Results – These results from the State Laboratories are imported and compiled electronically in the Central Office. All field offices will download results on a regular (once a week at a minimum) and as-needed basis. Users also have the ability to edit and add results from private labs. Bacti Frequency Override (when applicable).

Facilities – Source Water Assessment Inventory, GWUDISW Inventory and GWUDISW date for *sources*. An MPN Frequency must be selected if the PWS takes routine MPN samples.

Chem Schedules – All field offices will enter and maintain chemical sampling schedules in this module. This information is submitted electronically to the State Laboratory to order kits for waterworks. This order is sent 60 days prior to the start of each quarter. Routine, compliance results that are entered into SDWIS (manually or electronically from the State Laboratory) will update the scheduler information.

Print New Forms by PWS – Used to generate paper input forms, kit order forms and labels for ordering non-scheduled (special, confirmation, emergency, etc.) kits from the State Laboratory.

Inspections – All field offices will record all inspection information displayed on the Inspection tracking edit screen. This inspection information is automatically transmitted to the Central office during the download of bacteriological results which is performed at least once a week.

Pb Cu Basics – All field offices must record lead and copper sampling information using this module.

CCR – All field offices must record Consumer Confidence Report dates into this module.

Attached to this memo is the User’s Guide for this application.

Attachment

R&R Program User's Guide
Version 5.7b

May 30, 2000

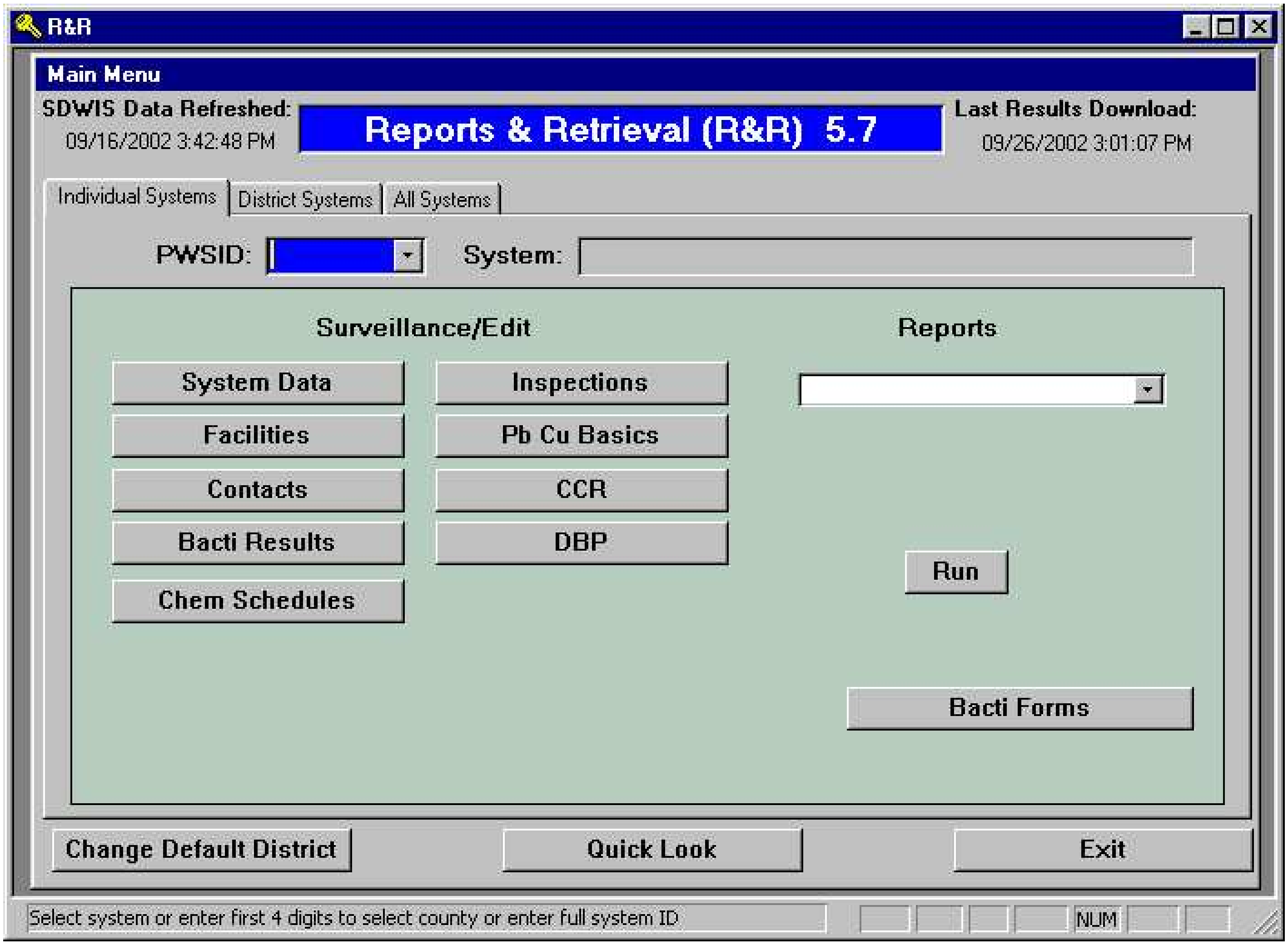
Revised January 2, 2003

Attachment to Working Memo 824

R&R Program User's Guide
Version 5.7b

Table of Contents

I. Main Menu



SDWIS Data Refreshed: Date and time of the last refresh from SDWIS performed by the System Administrator. All users must be logged out of the application for the System Administrator to perform this function. Any new SDWIS information will be available in R&R after the refresh.

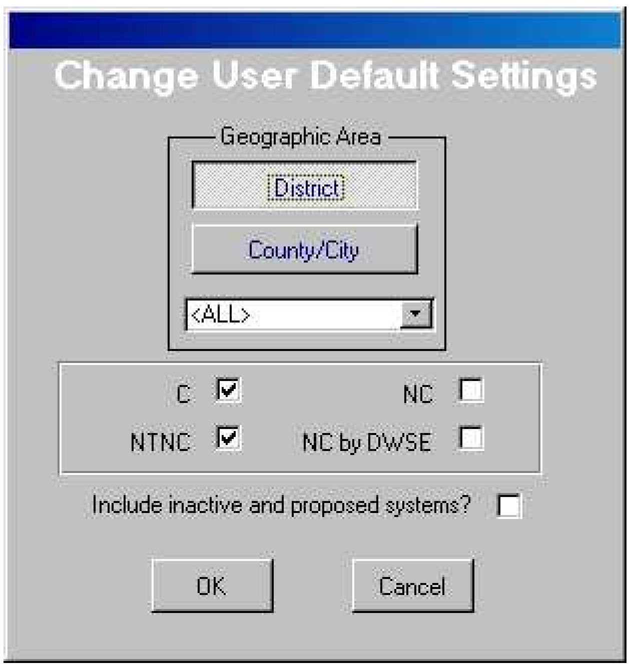
Last Results Download: Date and time of the last download of bacteriological results from DDW Central office performed by the System Administrator.

CHANGE DEFAULT DISTRICT - This feature is provided so that users can customize the application to filter systems for their specific area. Users first choose to filter by City/County or District. If you want to work with ALL systems in the field office, click the DISTRICT button, and select <ALL> from the pick list. District and City/County designations for a system are set in the SDWIS application under *Related Geographic Areas.* (See WM 823)

Select the type of systems desired by checking the appropriate boxes. NC by DWSE are transient non-community systems that are under the jurisdiction of DDW. These are identified by the presence of a letter "D" in the SDWIS Alt. State field (see WM 823). Eventually DDW will be responsible for all TNC systems and the "by DWSE" distinction will be obsolete.

Check the "Include inactive and proposed systems" box to display inactive and proposed systems. Also check this box if you need to generate forms or view lab results for the "Million Series" PWS. These are ersatz SDWIS systems created for each field office to order new well development samples (1000000, 2000000, 3000000, 4000000, 5000000, 6000000).

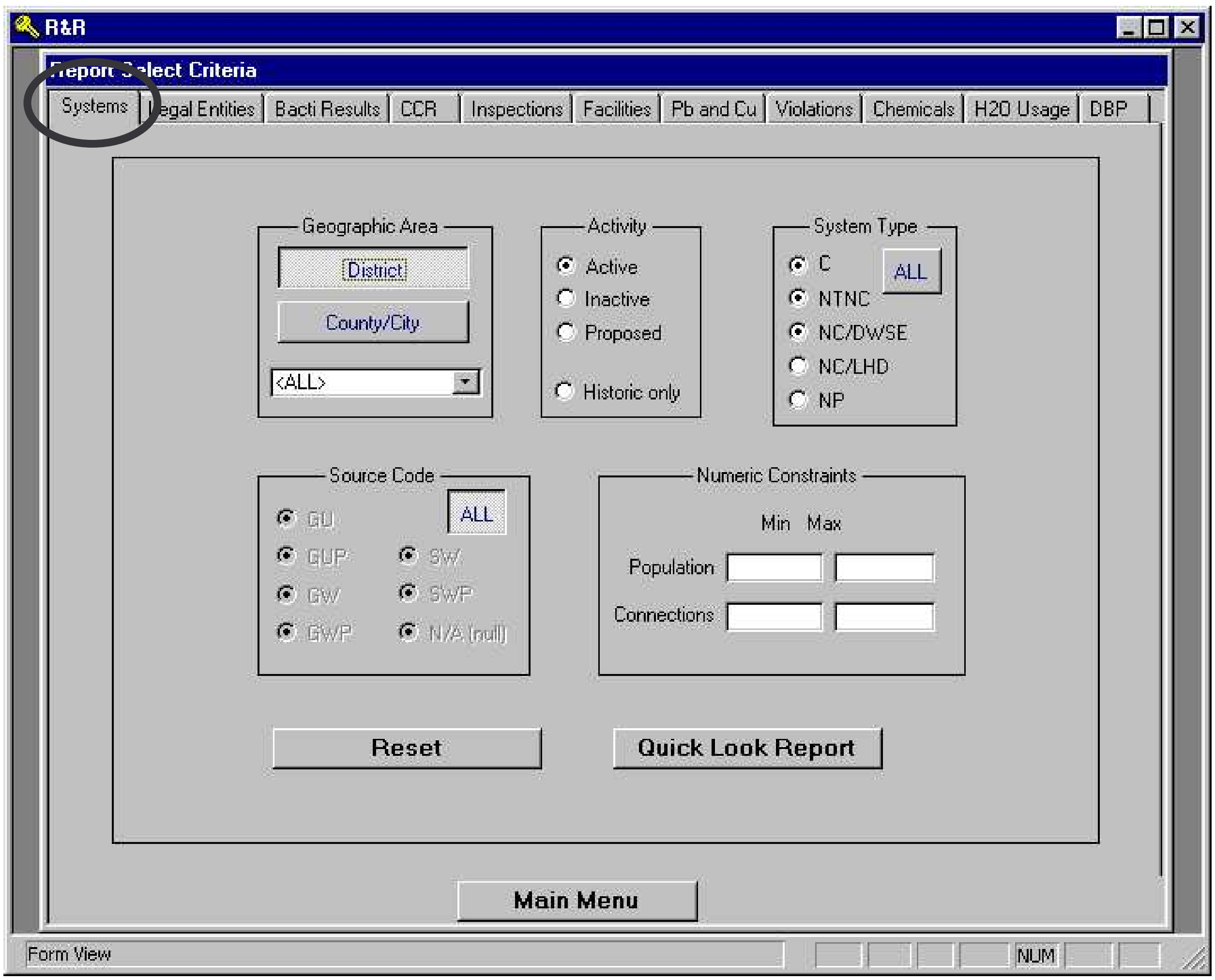
Selections on this screen determine which systems will be available in the **PWSID** box on the main menu.



I. Main Menu ➔ Quick Look ➔ Systems Tab

Quick Look - This button displays a selection screen for generating a wide variety of reports based on variable criteria. The **SYSTEMS** tab is used to filter systems and produce a "quick look" of those systems in a report. Although the user specified "Default District" will be the default filter, users can change the criteria to report information for different districts/counties. Changing the filtering criteria for these reports does not effect the user's default filter choices set by the *Change Default District* feature (see Page 6).

SYSTEMS TAB



Geographic Area – pulls matching data from entries in SDWIS Related Geographic Areas. The items in the drop down box will change based on the selection button below.

District – <ALL> pulls all data sorted and grouped by District. <NULL> is provided because some systems may not have district listed as a related geographic area.

County/City – Choose one from this list. <NULL> is provided because some systems may not have County/City listed as a related geographic area.

I. Main Menu ➔ Quick Look ➔ Systems Tab

Activity – Self explanatory except for the Historic Only option. Please remember that the Historic flag is placed on systems that have been "deleted" from SDWIS. This flag is independent of the activity status. IT IS POSSIBLE FOR A SYSTEM TO BE "DELETED" in SDWIS AND STILL HAVE AN ACTIVE STATUS. Therefore, when the Historic Only box is checked, the Active, Inactive and Proposed flags are also checked on and disabled from user selection. This is the only way to get a truly accurate result of historic systems. **At least one activity status is required to generate a report.**

Type - When the ALL button is clicked "on", every type is selected and user is prevented from choosing individual types. If the ALL button is then clicked "off", all types are also turned to "off" and user is then permitted to check each one individually. **At least one type is required to generate a report.**

Source Code – same features as *Type* listed above. **At least one source code is required to generate a report.**

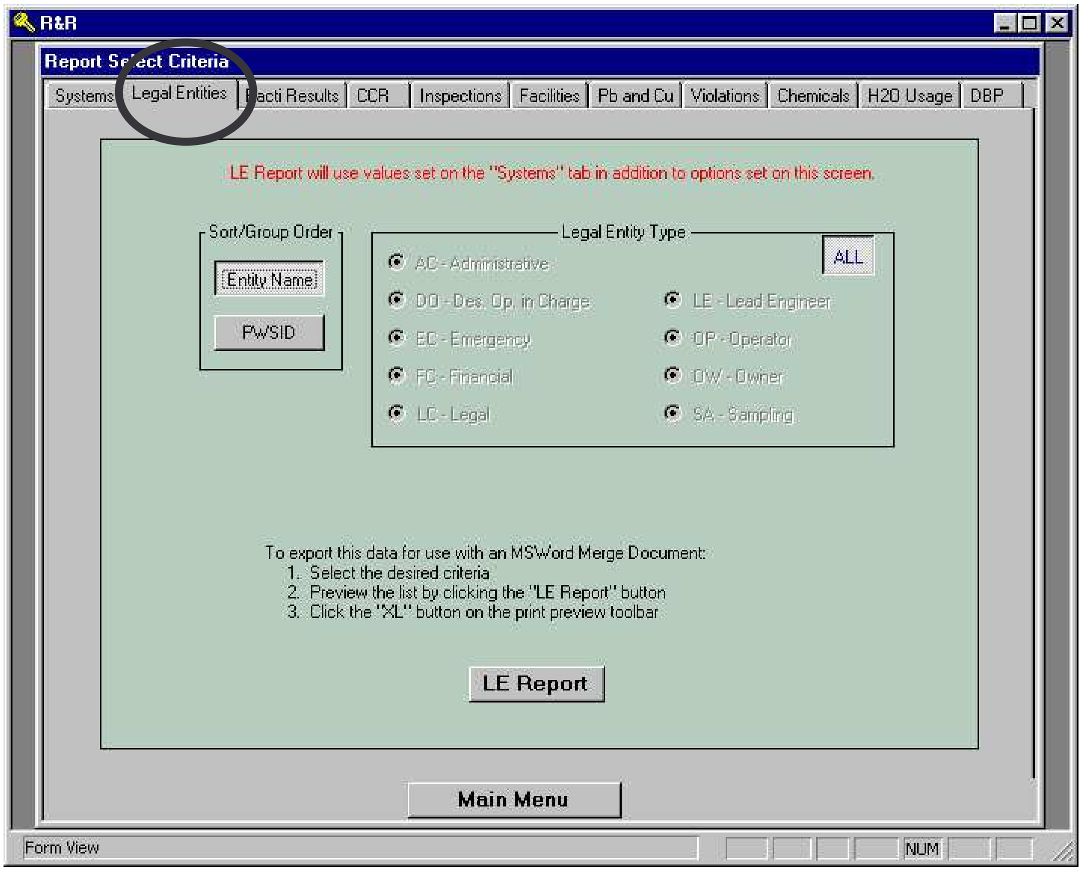
GU	Ground Water under Direct Influence
GUP	Ground Water under Direct Influence, Purchased
GW	Ground Water
GWP	Ground Water Purchased
SW	Surface Water
SWP	Surface Water Purchased
N/A (null)	Pulls any systems in which no information on sources has been entered
All	Pulls all systems, regardless of water source.

Numeric Constraints – self explanatory. If min and max values are left blank (the default), then a value between 0 and 9,999,999 is assumed.

Reset button – Changes the options to the startup defaults.
Quick Look button – Displays the systems in a report that meet the set criteria.
Main Menu button – Returns to main menu

I. Main Menu ➔ Quick Look ➔ Legal Entities Tab

LEGAL ENTITIES TAB



The LE report will display legal entity information for systems which <u>MEET THE CRITERIA SET ON THE SYSTEMS TAB</u>. For Example: If you want a list of addresses for Community Systems Samplers, you would first make sure that only "C" is chosen under *System Type* on the **Systems Tab,** then you would choose only "SA" on the **Legal Entities Tab.**

AC	Administrative	LE	Lead Engineer
DO	Designated Operator in Charge	OP	Operator
EC	Emergency	OW	Owner
FC	Financial	SA	Sampling
LC	Legal		

For instructions on how to use address information to generate a mail merge document, please see Appendix A Page 69.

I. Main Menu ➔ Quick Look ➔ Bacti Results Tab

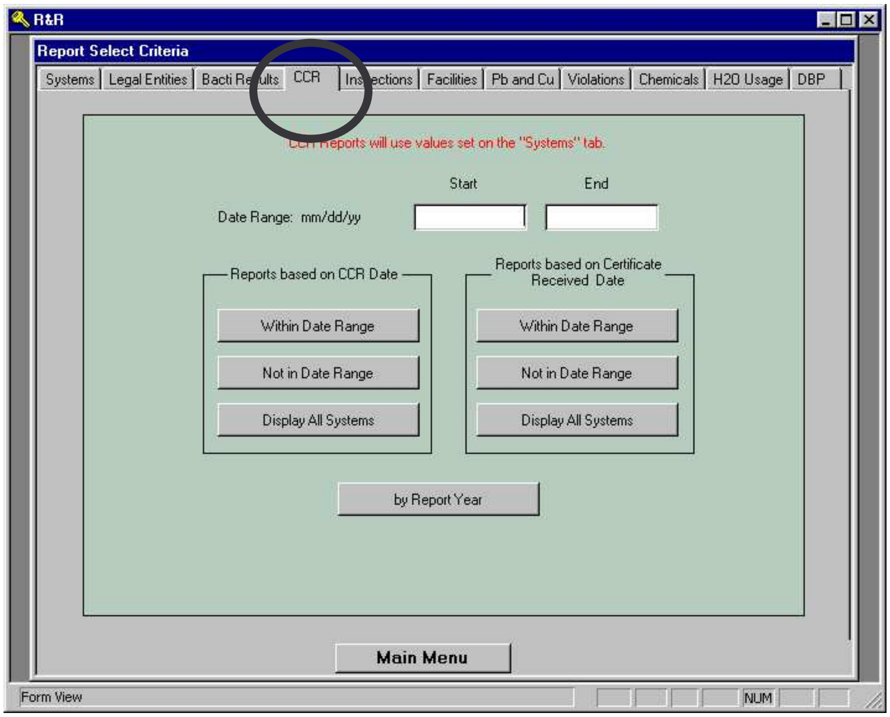
BACTI RESULTS TAB

Each button will display a report for the date range specified on each button. Or, for a special date range, click the Special Range Button and enter the dates in the pop up boxes provided, then click the RUN button. The results are also filtered based on systems which MEET THE CRITERIA SET ON THE SYSTEMS TAB.

I. Main Menu ➔ Quick Look ➔ CCR Tab

CCR TAB

Report CCR information by either CCR Date **OR** Certificate Received Date **OR** by Report Year for the user specified date range. Enter the dates in the boxes provided, then click the desired report button. The results are also filtered based on systems which MEET THE CRITERIA SET ON THE SYSTEMS TAB. Reports use data entered in the CCR module (page 47).



last date - is the most current CCR or Rec. Cert. Date
EX: 01/01/98, 01/01/99, and 01/01/00 - **01/01/00** is the *last date*

Within Date Range – Will only display systems whose *last date* is in the user entered range.

Not in Date Range – Will display systems whose *last date* record is either empty or is less than the start date.

Display All Systems – Displays ALL systems (based on criteria set on the systems tab). If the systems' *last date* is within the user entered range, that information will display, otherwise, the CCR Date, Rec. Cert. Date and Comments will be blank on the report.

by Report Year – Will display all systems where the CCR Report year falls between the user entered range.

I. Main Menu ➔ Quick Look ➔ Inspections Tab

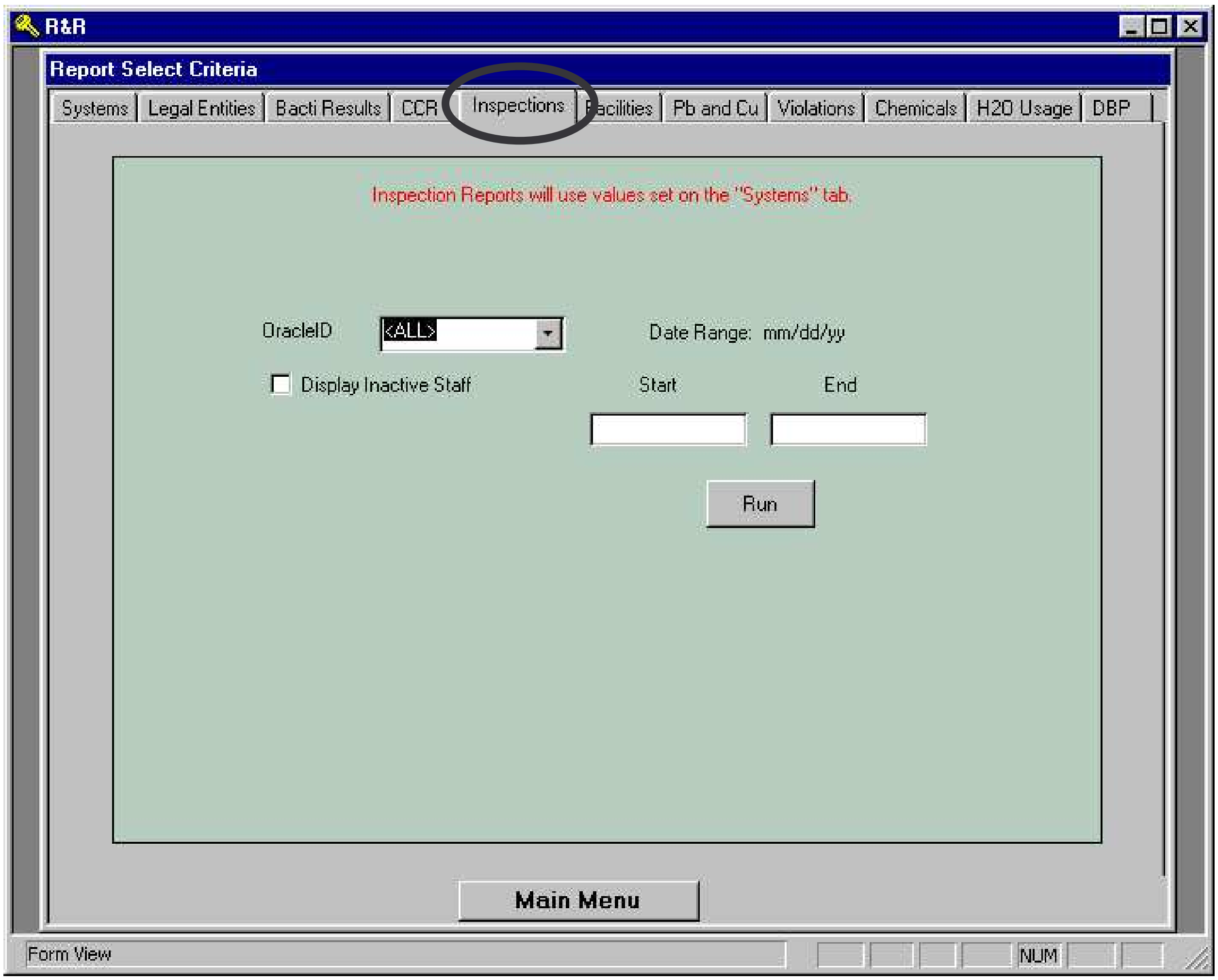
INSPECTIONS TAB

Report uses data entered in the Inspections Module (page 38).

Select an employee by choosing from the ORACLEID pick list. Only “active” employees are displayed for selection. If you wish to run a report for a specific “inactive” employee, click the “Display Inactive Staff” check box. The ORACLEID list will then display all inactive employees.

The Inspection report generated will display inspections for the specified user, occurring between the user specified date range AND systems which <u>MEET THE CRITERIA SET ON THE SYSTEMS TAB.</u>

Note: All employees (Active AND Inactive) will display on the report if ORACLEID = “<ALL>”



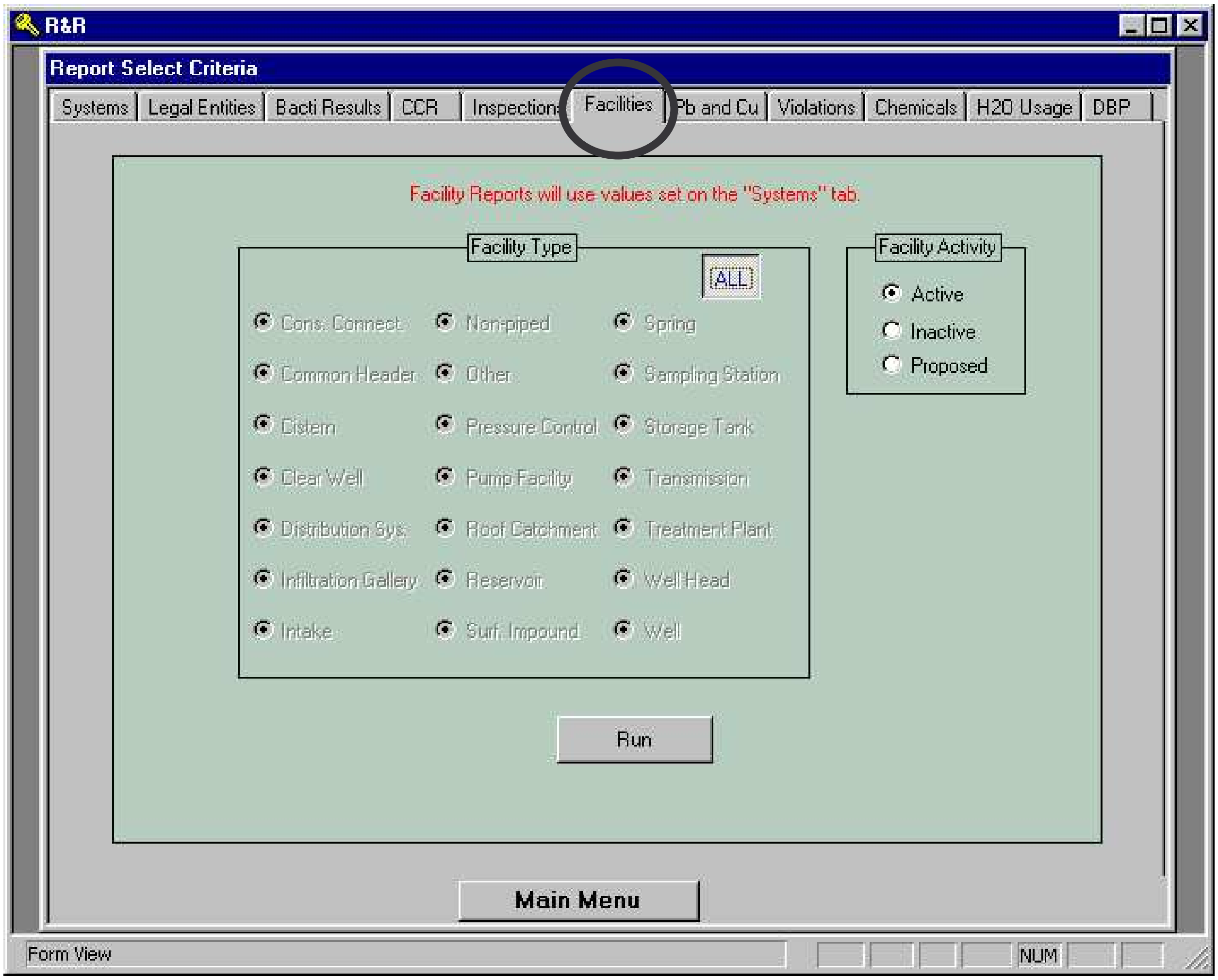
I. Main Menu ➔ Quick Look ➔ Facilities Tab

FACILITIES TAB

Reports facility information for systems which <u>MEET THE CRITERIA SET ON THE SYSTEMS TAB,</u> based on Facility type, and activity status.

Please note that Facility Activity is separate from System Activity on the Systems Tab. A Facility is marked as Active, Inactive or proposed through the SDWIS application see WM 823.

When the ALL button is clicked "on", every facility type is selected and user is prevented from choosing individual types. If the ALL button is then clicked "off", all types are also turned to "off" and user is then permitted to check each one individually. **At least one type is required to generate a report.**



I. Main Menu ➔ Quick Look ➔ Pb and Cu Tab

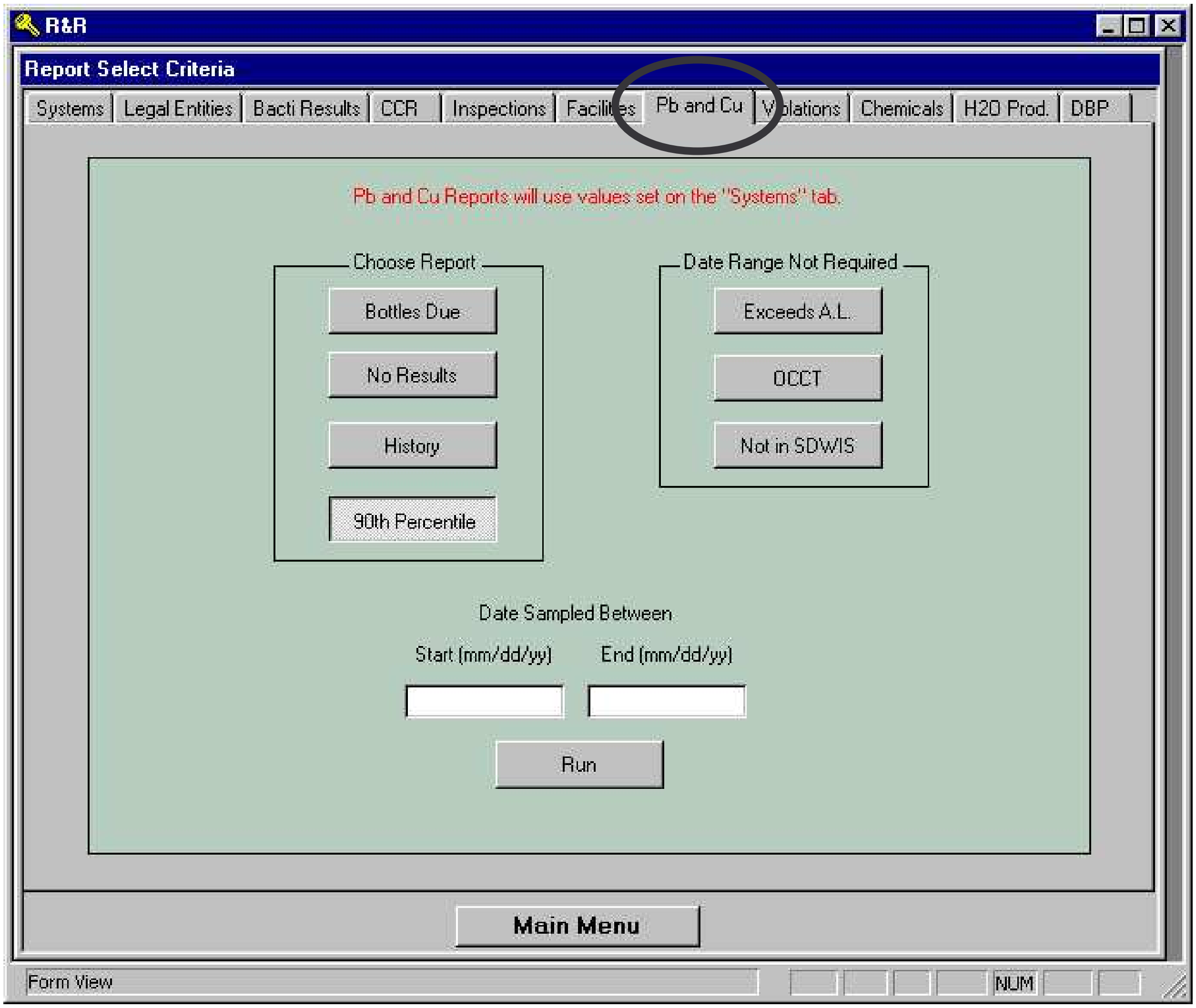
Pb and Cu TAB

All reports use criteria set on the "Systems" Tab

All reports except the 90th Percentile report uses data from the Pb & Cu Basics module (pages 41 through 46).

BOTTLES DUE – The last sample record is found for each system. From that subset, systems where the *Sampling Period* ***Begin Date*** falls between the user provided dates, are reported.

NO RESULTS **-** The last sample record is found for each system. From that subset, systems where the *Sampling Period* ***Begin Date*** falls between the user provided dates AND the *Date Sampled* is blank, are reported.



HISTORY – reports systems where the *Date Sampled* falls between the user provided dates.

90th PERCENTILE – Calculates the 90th percentile value of Lead and Copper Results (<u>in SDWIS</u>) that have *Date Sampled* between the user provided dates.

I. Main Menu ➔ Quick Look ➔ Pb and Cu Tab

EXCEEDS A.L. – reports all records for systems which have one or more results which exceeds the Pb or Cu action levels. User provided date range not used for this report.

OCCT – report is grouped by systems who failed to install OCCT and those in which OCCT installation did not meet the deadline. If the "OCCT Must be installed by" date is prior to the current date AND the "OCCT Installation Complete" date is blank, then the system is reported as failed to install. If the "OCCT Must be installed by" date is prior to the "OCCT Installation Complete" date then the system is reported as late installation. User provided date range not used for this report.

Not in SDWIS – reports all results where the SDWIS Report Date is blank (See Page 43). User provided date range not used for this report.

As with all the other tabs of the Quick Look Screen, only Pb and Cu data for systems which MEET THE CRITERIA SET ON THE SYSTEMS TAB, will be displayed.

I. Main Menu ➔ Quick Look ➔ Violations Tab

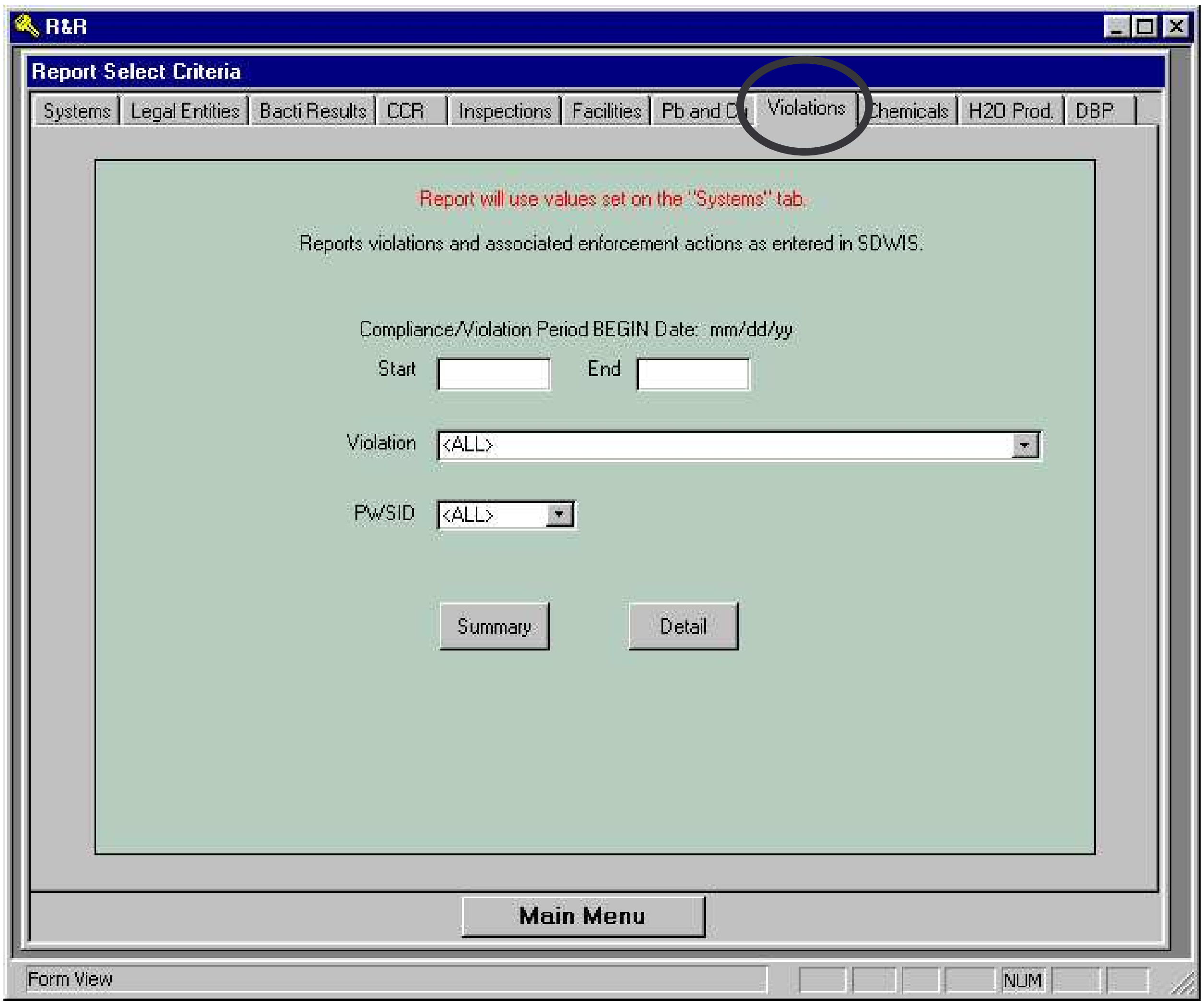
Violations TAB

This report shows violations entered into SDWIS that match **criteria set on the "Systems" Tab**

Start and End Dates: Enter a range for reporting violations with *Compliance or Violation Period BEGIN dates* between the two dates. If the date fields are left blank, the default of January 1, 1800 will be used for the begin date and Current Date will be used for the end date. The report selects and displays either compliance or violation periods based on the violation type. For a list of violations that use violation period rather than compliance period, see the Violations section of WM 823.

Violation: Select a violation type from the drop down box, if desired.

PWSID: Select a PWSID from the drop down box, if desired.

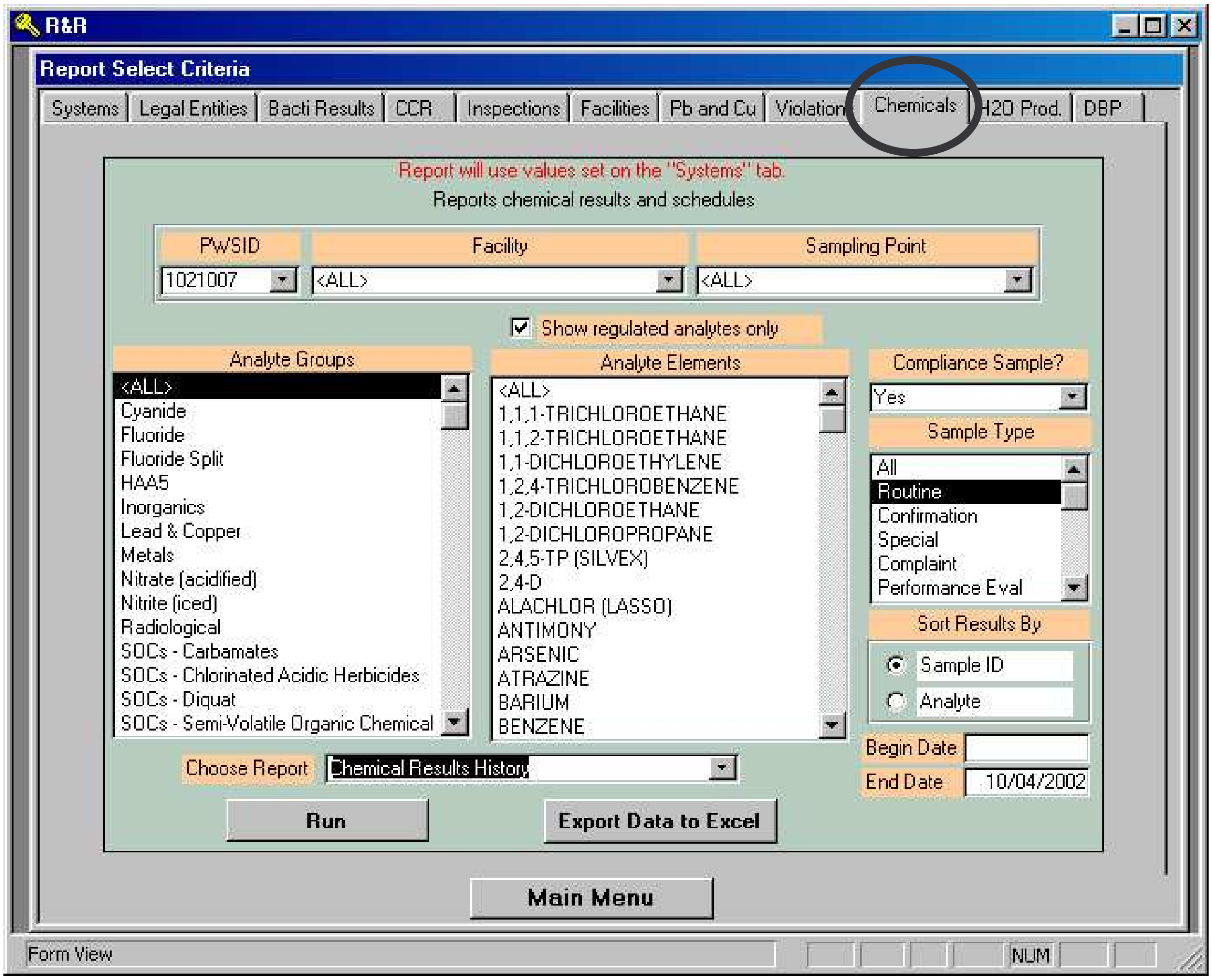


SUMMARY – Reports violation information and related enforcement action codes based on user criteria selected from the Systems Tab and Violations Tab.

DETAIL – Reports violation information and related enforcement action codes, dates and enforcement numbers based on user criteria selected from the Systems Tab and Violations Tab.

I. Main Menu ➔ Quick Look ➔ Chemicals Tab

Chemicals TAB



NOTE: Not all elements are visible at all times. Some are dependent on which report is selected.

PWSID: Select a specific PWSID from the list. Number 9999999 is <ALL>.

Facility: When a specific PWSID is selected, this displays the facilities for that system.

Sampling Point: When a specific PWSID is selected, this displays all sampling points for that system. If a specific facility is selected, this displays the points for that facility. If the facility is set to "<ALL>" when a sampling point is selected, the facility box will automatically display the facility associated with this point.

Show regulated analytes only: This box is checked by default and displays only analytes that are flagged as regulated in SDWIS. To display all analytes, deselect the box.

Analyte Groups: When a group(s) is selected, the analytes that comprise that group are displayed in the Analyte Elements box. Multiple groups can be selected by using the shift or control key combinations.

Analyte Elements: When a group(s) is selected, the analytes that comprise that group are displayed in the Analyte Elements box. Multiple elements can be selected by using the shift or control key combinations. If the Analyte Elements box is visible, you *MUST select an analyte to generate a report.*

I. Main Menu ➔ Quick Look ➔ Chemicals Tab

Compliance Sample: You may chose to report compliance, non-compliance or both.

Sample Type: Select the desired sample type(s). Multiple groups can be selected by using the shift or control key combinations. "Routine" is the default selection.

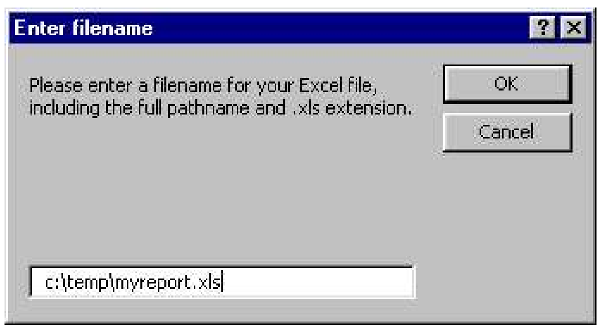
Sort Results by: This controls the sorting on some reports.

Begin Date/End Date: Both must be provided to generate a report. The current date is the default end date.

Choose Report: Select a report to run from the pick list.

Run: Displays the report in print preview.

Export Data to Excel: Exports the data to an Excel file specified by the user in the pop up window.



All reports use criteria set on the "Systems" Tab

Average by Facility - From the user selected date range and Analyte(s), a report is generated that averages the chemical results (from SDWIS) by quarter for each facility. A running 4 quarter average is also calculated.

Average by Point - From the user selected date range and Analyte(s), a report is generated that averages the chemical results (from SDWIS) by quarter for each Sampling point within each Facility. A running 4 quarter average is also calculated.

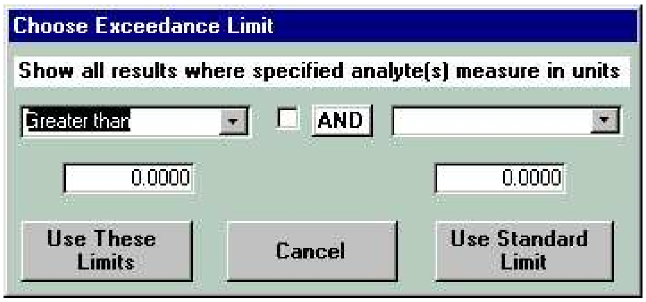
Results History - Reports all chemical results (from SDWIS) that match the criteria set on the Systems and Chemicals tabs. Users can sort results by Sample ID or by Analyte.

Chemical Schedule - Reports scheduled samples by last sample date or next sample date (chosen from "Select By" option box that appears when this report is selected from the pick list). This information is entered in the Chemical Schedule module see Page 31.

I. Main Menu ➔ Quick Look ➔ Chemicals Tab

Exdeedance Report - Reports chemical results (from SDWIS) that match the criteria set on the Systems and Chemicals tabs. Users set the exceedance limit on the pop up screen that appears after clicking the "run" button:

Users can enter an exceedance limit or use the standard limit.

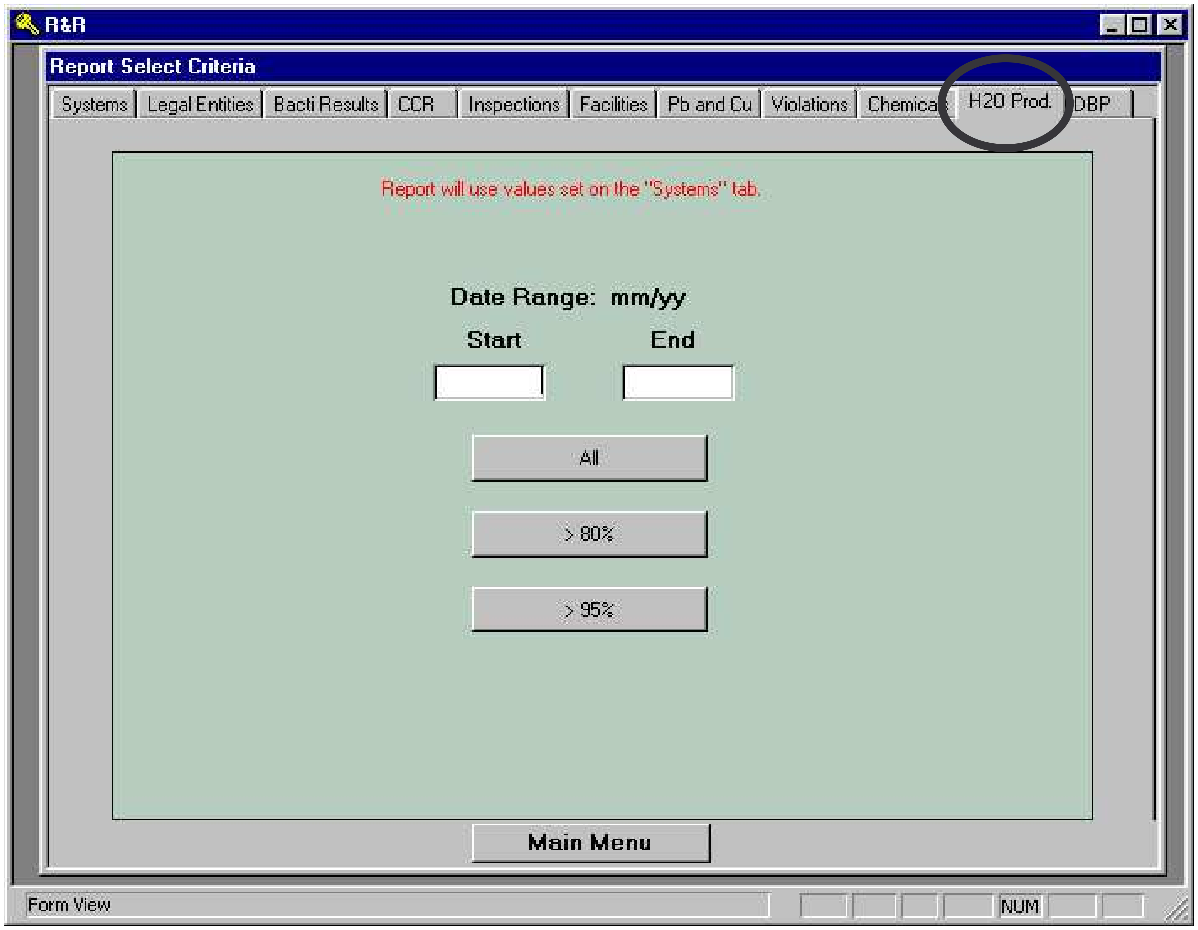


Last Chemical Sample Date - Reports the most recent chemical result record from SDWIS. This is not based on the *scheduler* although the last sample date for an analyte group in the scheduler should be the actual last sample date from the results. Since the user has the ability to override information in scheduler, there could be a disparity between scheduler and the actual result record in SDWIS.

I. Main Menu ➔ Quick Look ➔ H2O Prod. Tab

H2O Prod. TAB

Enter a start and end date and click the desired report button. This data is stored in R&R on the Water Production tab of the System Data screen (see Page 25).



All reports use criteria set on the "Systems" Tab

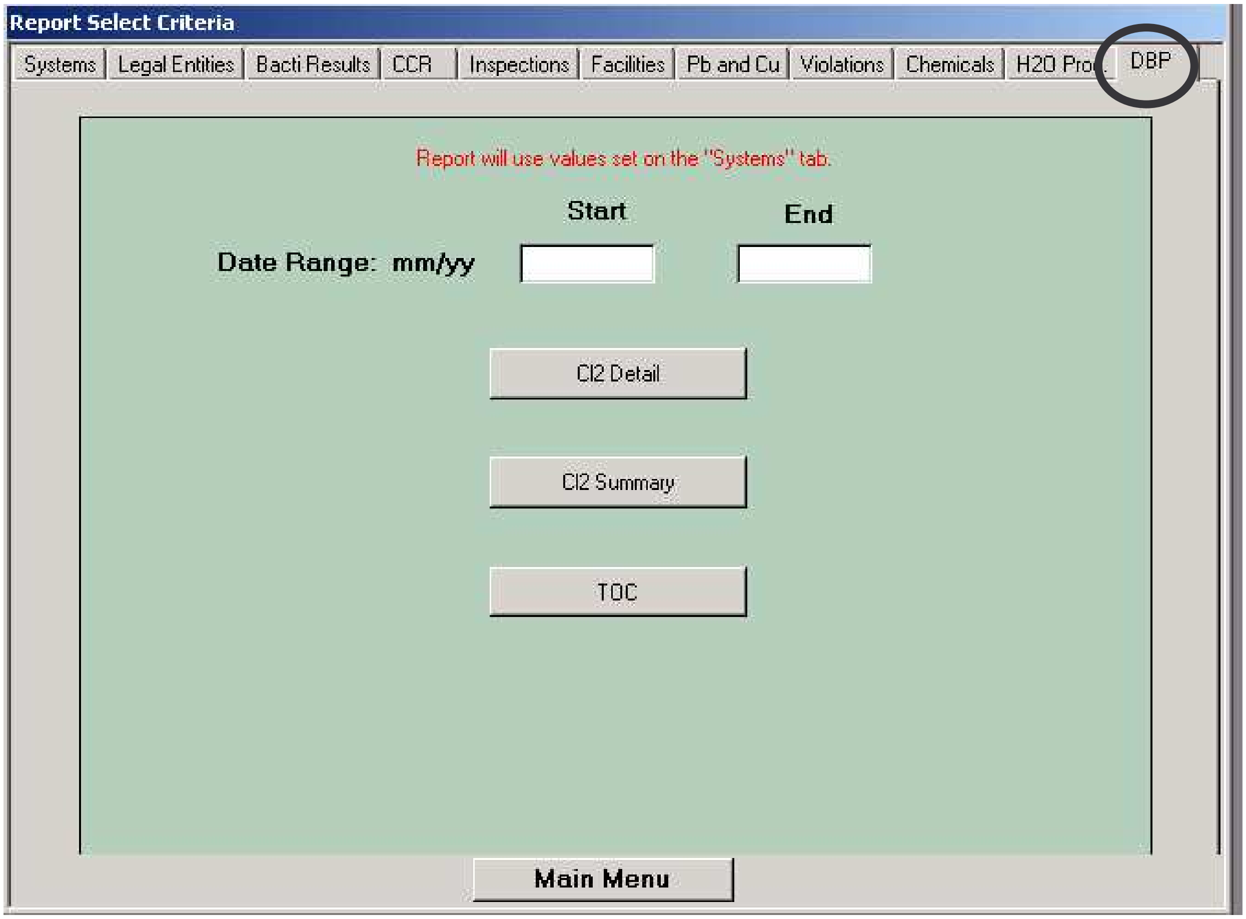
H2O Production – All – Displays the month/year, production and percentage based on SDWIS Total Design Capacity. Averages the production and percentage for selected date range. Identifies those with percentages > 80 and > 95. *Systems with a zero or blank design capacity will* *<u>not</u>* *display on this report.*

H2O Production – >80% – Displays month/year, production and percentage based on SDWIS Total Design Capacity for records with percentages exceeding 80%. Averages the production and percentage for displayed records. Identifies those with percentages > 95.

H2O Production – >95% – Displays month/year, production and percentage based on SDWIS Total Design Capacity for records with percentages exceeding 95%. Averages the production and percentage for displayed records.

I. Main Menu ➔ Quick Look ➔ DBP Tab

Disinfection By Products (DBP) TAB



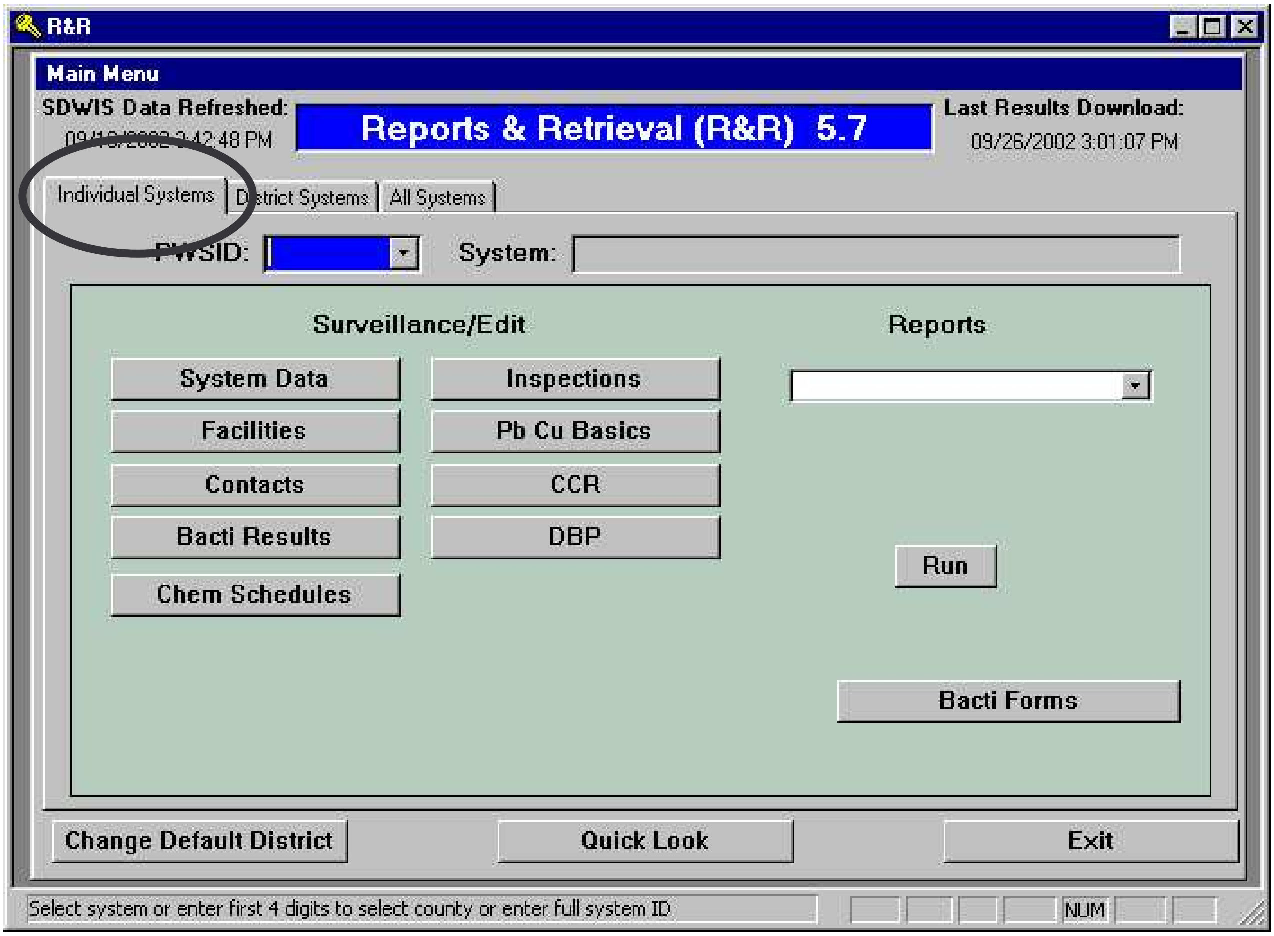
All reports use criteria set on the "Systems" Tab

Chlorine Residual (CL2) Detail – Data is obtained from Bacti Result records (see page 55) and/or DBP CL2 Average data entry (see Page 30). Only systems that are required to disinfect are included. This field can be found on the System Data – Basic screen (see Page 23). CL2 values are averaged by System for each month within the user entered date range. Running quarterly averages and 4 quarter averages are also calculated. Records entered as averages from the DBP module are recognized by a letter "A" beside the result. Missing months, quarters and results without CL2 values are also specified.

Chlorine Residual (CL2) Summary – Same as the detail report except that individual results are not displayed. Record detail begins at the monthly average level.

TOC Report – Reports information from the DBP TOC Removal Ratio module (see Page 50). Displays the monthly removal ratio, quarterly average and running 4 quarter average.

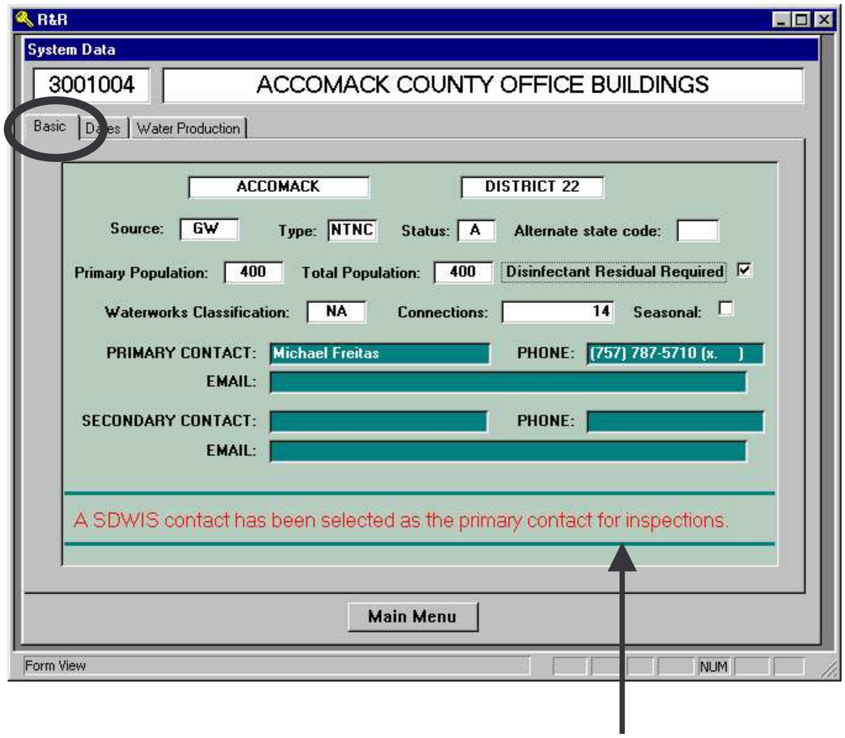
II. Individual Systems



PWSID This shows the list of all systems that match the filtering options set for the default district (See Page 6). All reports and buttons on this screen REQUIRE the selection of a PWSID.

System Data – Basic Tab

Displays pertinent SDWIS data. Provides a place to store additional contact information for secretaries etc., that do NOT qualify as a contact in SDWIS. The information for Primary Contact will display on the Next Inspection Report (See Page 64), UNLESS an inspection contact from SDWIS has been selected from the Contacts screen (See Page 28).



If an inspection contact has been selected from the Contacts screen, the following message will be displayed between the two green bars.

A SDWIS contact has been selected as the primary contact for inspections.

Samplers, Owners, etc. should NOT be entered here. They should be entered in SDWIS.

Primary Population is the Average Daily Production Population count from the SDWIS PWS Basic Information screen.

Total Population is the combined total of all population types, such as wholesale that are not included in the primary population.

Disinfection Residual Required – indicates that the system is required to disinfect. This will also control the system's inclusion on DBP reports.

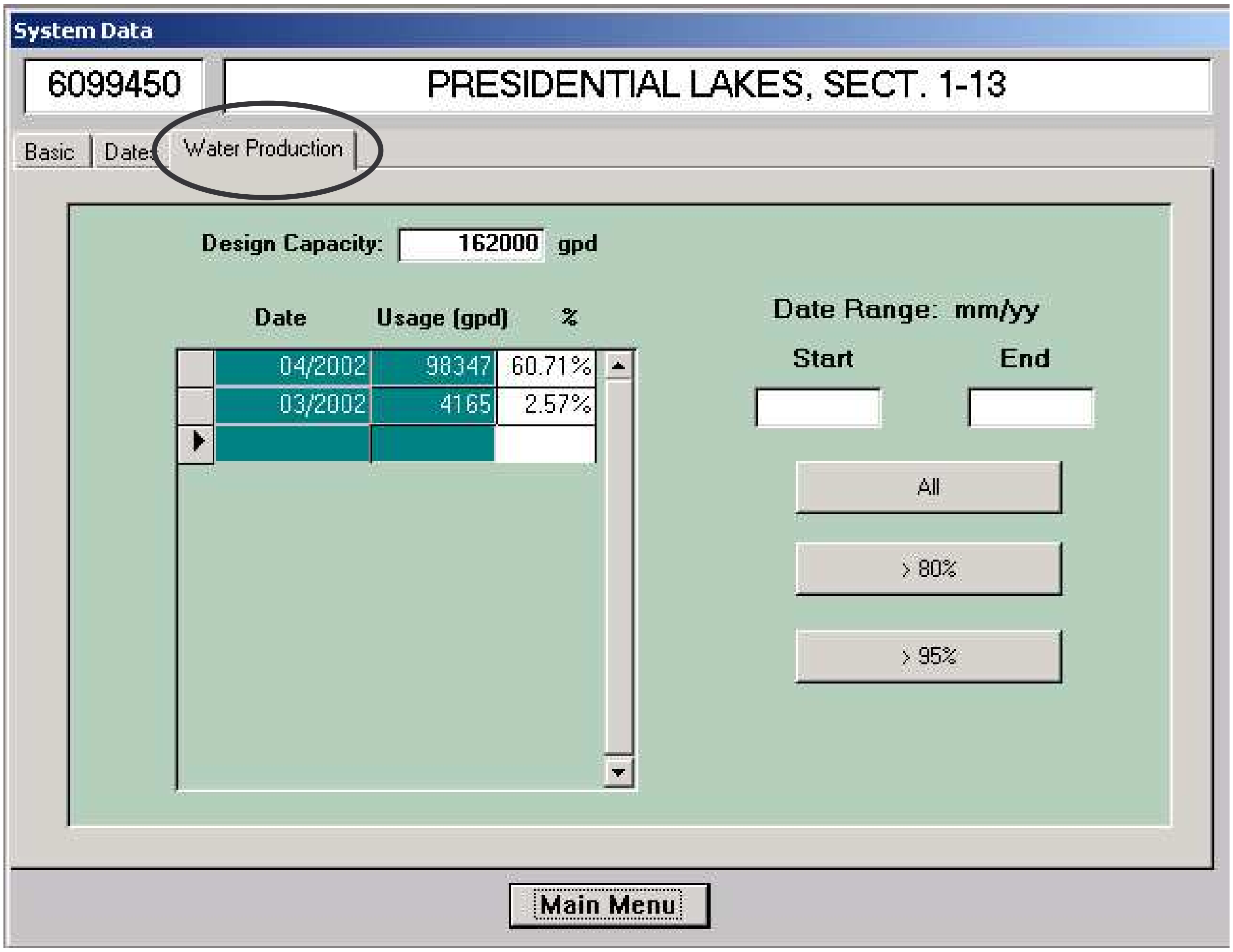
Seasonal – indicates that the system is not in use for a period of time throughout the year. Although this should be identified in the SDWIS Annual Operating Period, doing so will not exclude the system from displaying on NOV reports (page 63) as a failure to sample. This box can be checked so that it is flagged on the NOV reports as seasonal.

System Data – Dates Tab

A history of previous Cap. Dev. Dates can be viewed by clicking the CDA History button. Each time you change this date, the current date is added to the history file.

Description, Comments and Action fields are provided as places to store additional information. Action Notes can be viewed and edited for all systems in a user's default district through the Action Notes button on the Districts tab (see page 56) and by running the Action Notes report (page 63).

If there are several plans that have the same date, the "Bulk Entry" should be used.

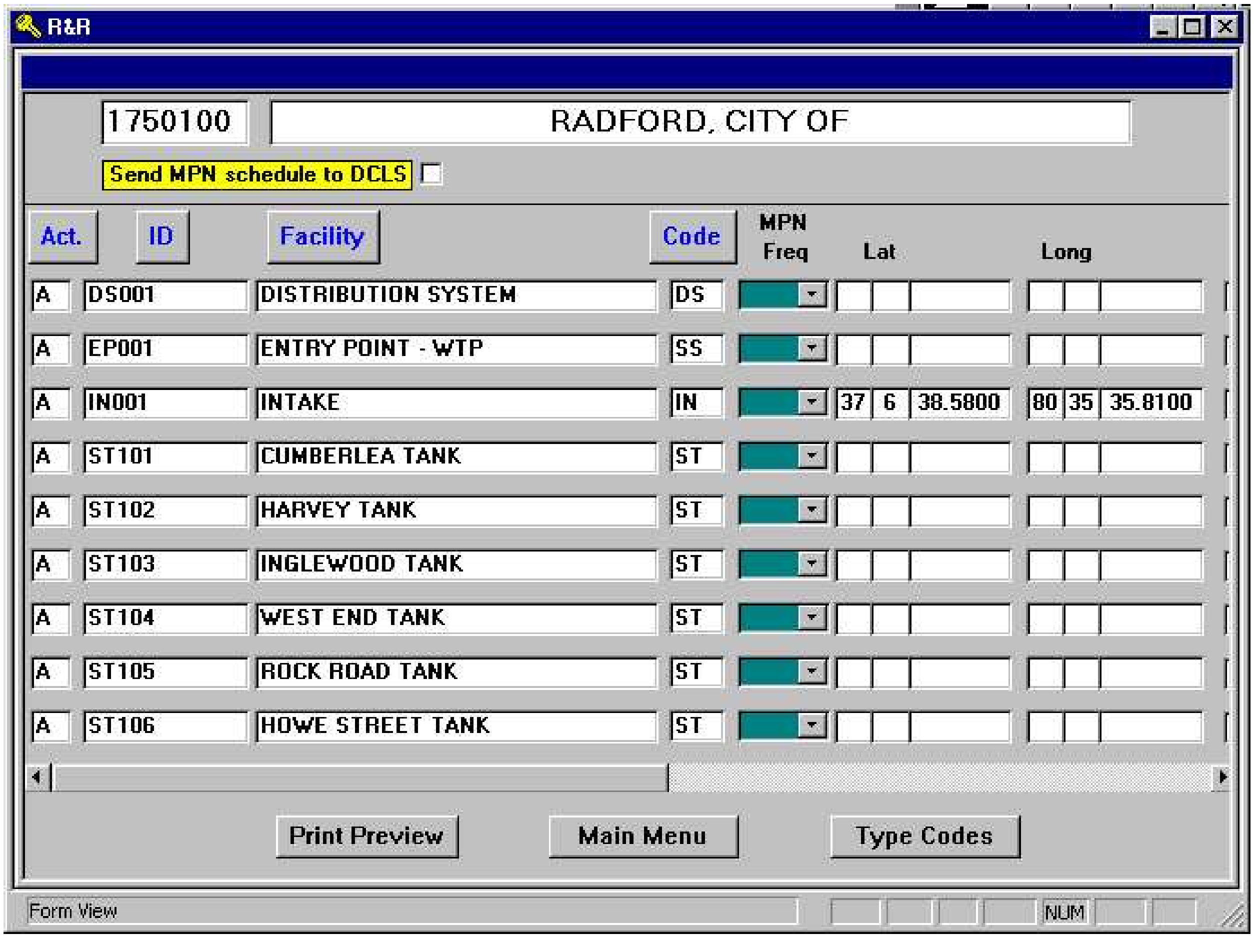


Design Capacity is obtained from SDWIS. Enter the month/year and the usage in gallons per day. The percentage is automatically calculated. The reports are the same as the Quick Look Reports (Page 20) for the individual system.

The text “**GRANDFATHERED”**, will display if a system has been designated as such in SDWIS. A report can be generated from this screen even if the design capacity is zero or null.

Sorting: Users can sort the facilities by clicking the blue lettered buttons (Activity, Facility ID, Facility Name, Facility Code)

To see a description of Facility Type Codes, press the **Type Codes** button.

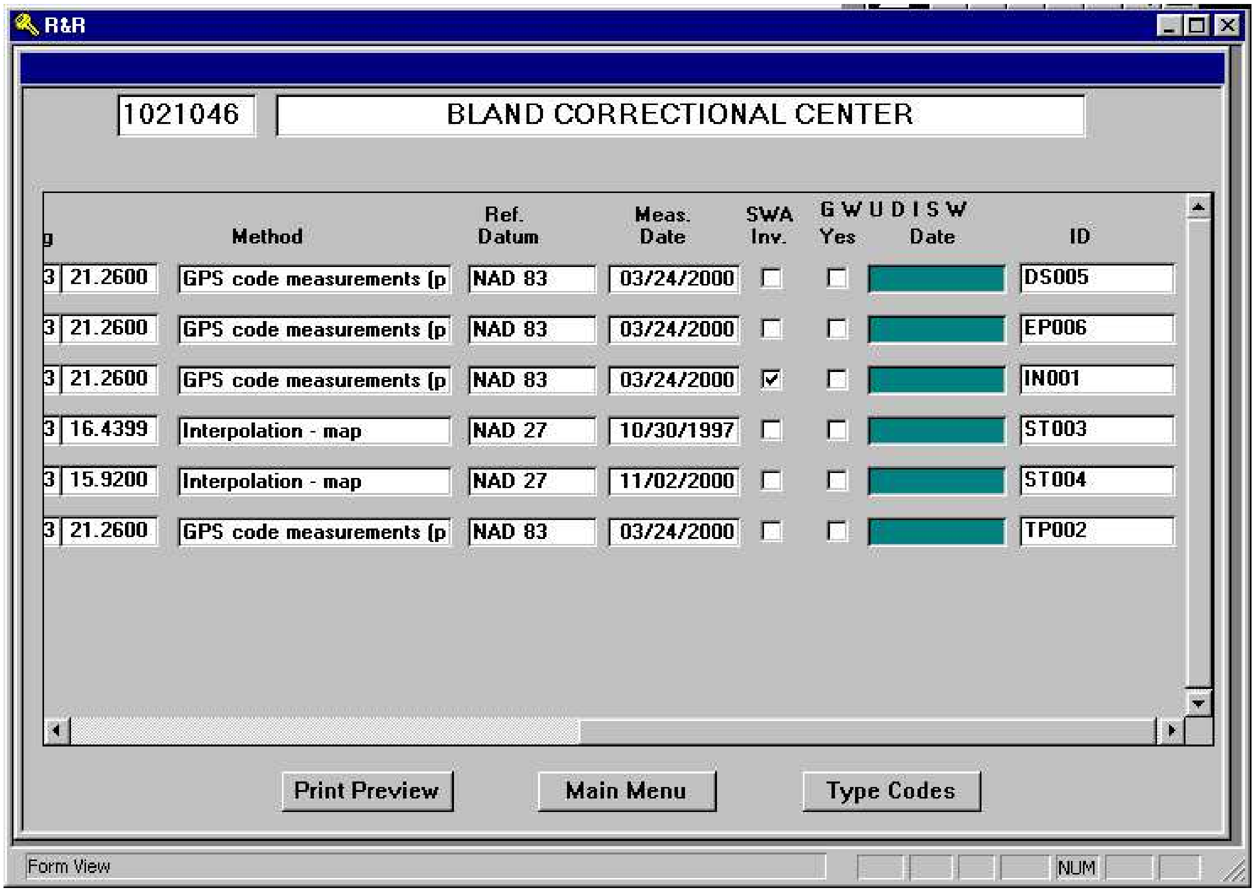


Send MPN Sched. to DCLS: If a system does not use DCLS for routine presence/absence testing as identified by the letter "N" in the SDWIS alt. state field (see WM823), this check box is available. If DCLS *does* perform routine MPN testing for this system, click the box to place a check in it. **This field is mandatory if routine MPN kits are ordered from DCLS AND they do not order routine presence/absence kits from DCLS.**

MPN Freq.: Select an MPN frequency from the drop down list. To report systems that require MPN, run the MPN Frequency report from the District Tab (see page 63). This information is automatically transmitted to the Central office on a weekly basis (minimum) through the Bacti Download procedure (Page 30). **This field is mandatory if routine MPN kits are ordered from DCLS.**

> ***NOTE: Annual MPN samples are ordered May 1, so that waterworks have kits by 3rd quarter.***

Scrolling to the right displays additional fields.

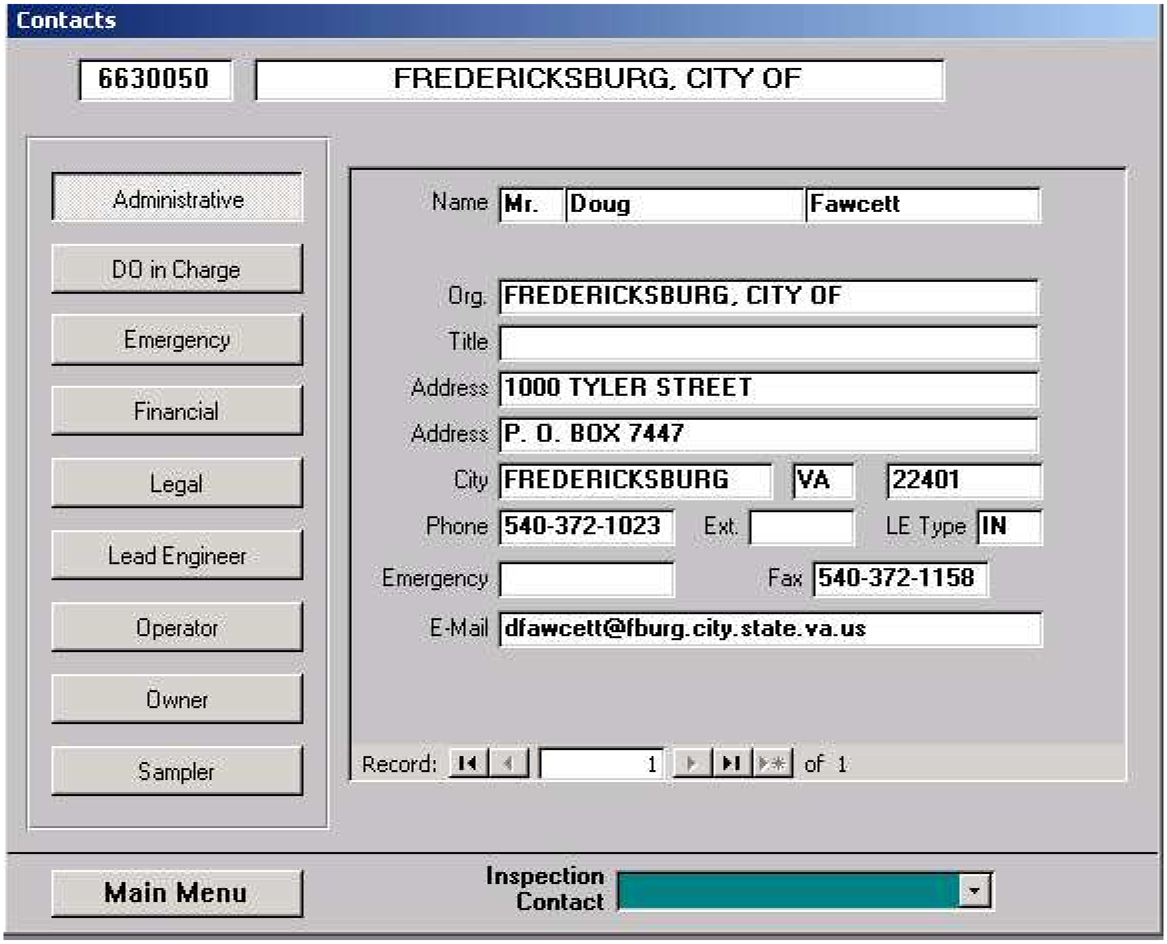


SWA Inv.: Indicates that Field Inventory of the Source Water Assessment Program (Form C) has been completed. **Mandatory for sources.**

GWUDISW Yes: Indicates that the source is ground water under direct influence of surface water. **Mandatory for sources.**

GWUDISW Date: Enter the date that the determination was made. **Mandatory for sources.**

Display all contact information from SDWIS. If there is more than one LE address for a contact type, the record counter at the bottom of the screen will indicate *Record 1 of x* (x is the number of LE's associated with the contact type.) For the majority of systems, there will be only 1 LE for each contact type.



Inspection Contact: If you want to use one of these SDWIS contacts as your primary contact for the Next Inspection report (Page 64), select the contact's name from the pick list.

This will override the primary contact name (if any) entered on the System Data screen (Page 23).

Select the "blank" line to use the System Data Primary Contact information again.

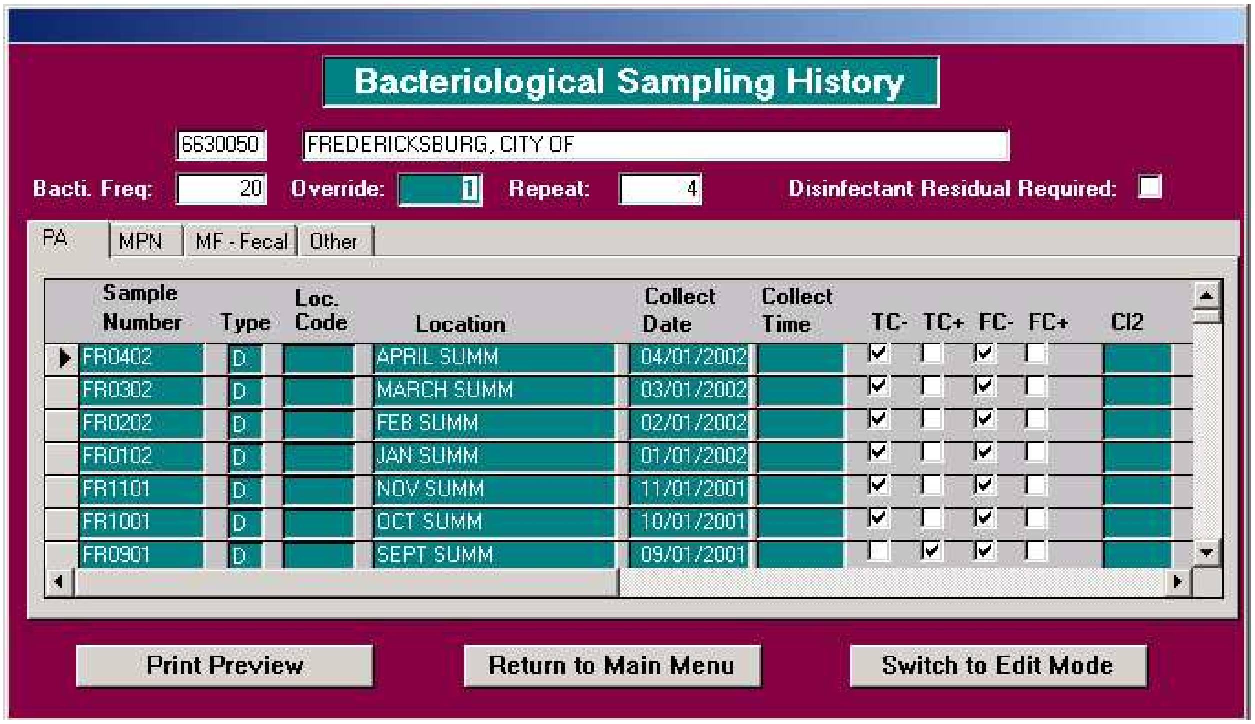
Please note: Only ***Individual*** Legal Entity types are available.

Note: Only Individual Type LE's have Phone Extensions, Fax numbers and E-Mail.

II. Individual Systems ➔ Bacti Results

This screen displays bacti results for the selected system. New result downloads are performed by the field office system administrator at least once a week. Electronic results are available from state laboratories and participating private labs. If electronic results are not available they must be manually entered (see Page 55).

Use of this module is MANDATORY.



Bacti. Freq.: System generated number of samples required based on the population and regs. This value is used for the routine forms printing in the Central Office as well as calculations on several reports in R&R.

Bacti Frequency Override: When this field is valued, it takes precedence over the system generated Bacti. Freq. This value is also transmitted to the Central office so that the appropriate number of routine forms will be generated. **Please exercise caution when using this field.** If you wish to use the system generated number, **leave the override field blank.** If you put a value in this field and wish to delete it, use the DELETE key to nullify the value. Do NOT put a zero in the field!

The bacti frequency or override value is assumed to be the # of samples required for a quarter for TNC systems with a population less than 1,000. For C, NTNC and TNC with population of 1,000 or more, this value represents the # of samples required for a month.

You can only view and edit existing results on this screen. Results are posted according to the test method used to analyze the sample. The methods are on individual tabs on this screen. The PRINT PREVIEW button will generate a report of all results for this system. The date range for this report is set to two years ago through current day. If you want a specific date range for results, select the **Bacti Results Report** from the **Reports** pick list on the Individual Systems tab (see page 54).

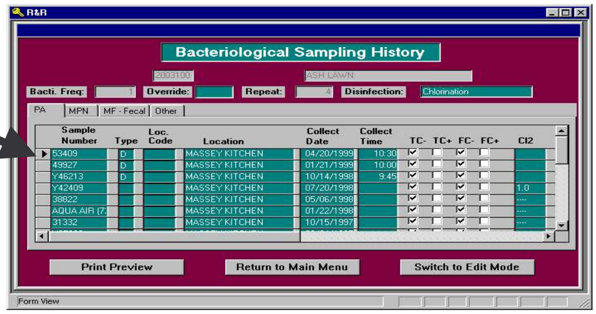
Disinfection Residual Required – indicates that the system is required to disinfect. This will also control the system's inclusion on DBP reports. Also accessible from the System Data screen (Page 23).

Switch To Edit Mode

The edit screen is locked to prevent accidental changes to data. To **edit a result**, click the *Switch to Edit Mode* button. The screen will turn gray (from red) indicating that changes can be made. The *Switch to Edit Mode* button will change to read *Switch to Protect Mode*. Records will be locked from changes when the *Switch to Protect Mode* is clicked.

The CL2 field is strictly numeric. Data that comes in from the lab as "yes". "no".or "n/a" is not stored.

To delete a result, (make sure you are in edit mode) click on the gray box to the complete left of the record's row. The box will then be shaded and the pointer arrow will turn from black to white. Press the DELETE button on your keyboard. You will be prompted for confirmation that you wish to delete the record before it is actually deleted.

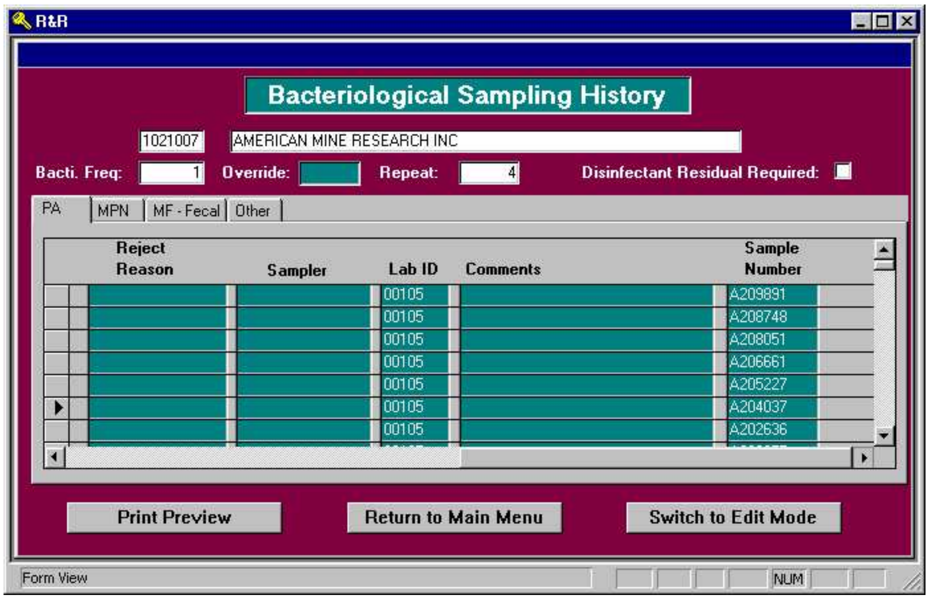


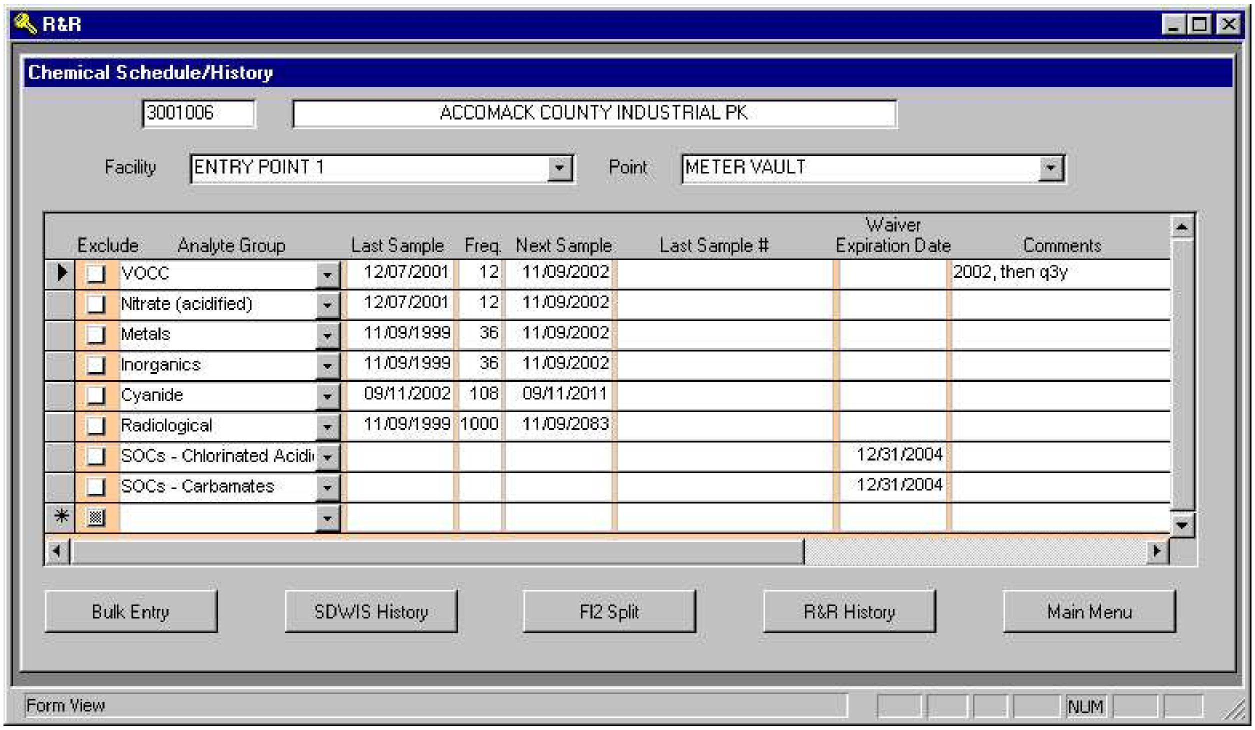
Users should exercise extreme caution when deleting results. If the result came electronically from the Central Office download procedure, you will need to contact Monte Waugh to have the record also deleted from the Central office database. Otherwise, the result will be added BACK into your database on the next download from the Central Office.

Only the Field Office system administrator can change a result method code. Please contact that individual for this action.

To add <u>new</u> results, use the **Bacti Results** button on the **District Systems** tab of the **Main Menu** (See Page 55).

Scroll right to see additional sample information.





Manual Entry: This module is used for scheduling chemical samples for the purpose of compliance monitoring and routine kit orders from DCLS. **Use of this module is mandatory.** A Facility and Point must first be selected before scheduling information is available for entry or edit.

Facility: List of facilities for this PWS from SDWIS. When “<ALL>” is selected, all sample points for the PWS are available in the “Point” pick list. Otherwise the “Point” pick list is limited to those assigned to the selected facility.

Point: List of sample points for this PWS from SDWIS. The contents of this list are dependent on the Facility selection.

Exclude: If a PWS has their own lab or uses another private lab to perform all or some routine chemical analysis, this box can be checked so that the selected schedule is not submitted to DCLS for invoicing. The schedule will still display on the review screen (see Page 61) but will be shown as being omitted from the DCLS file.

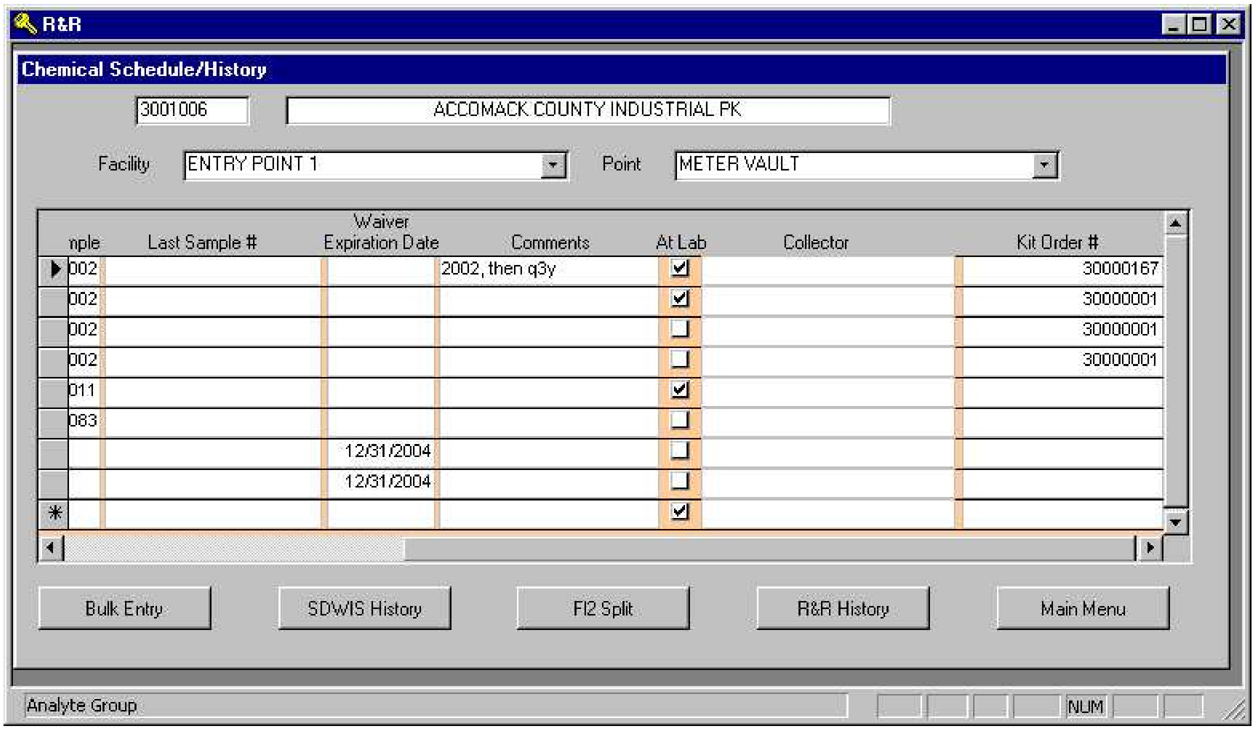
Analyte Group: List of Analyte groups usually relating to a DCLS kit. A group can only be selected once for a sample point. This list is created in the Central Office and is automatically updated in the field offices as necessary.

Last Sample: The collection date of the last sample. Change to this value automatically changes the next sample date based on the frequency value (if present).

Frequency (Freq.): The frequency (in months) that the system must monitor for the selected analyte group. Each group has a “default” frequency value that is controlled by the system administrator. Users can override this default value for the individual records. Change to this value automatically changes the next sample date based on the last sample date (if present).

Next Sample: The date that the next sample is due to be collected based on last sample date and frequency. Although this date is calculated by the other two fields, user can override and enter any date desired.

Scroll Right to view additional information



Last Sample#: The lab identification number for the samples (LIMS).

Waiver Expiration Date: The date the waiver expires.

Comments: Self explanatory.

At Lab: Used to keep a record of samples that have been collected by office staff and are at the lab being processed. The "at Lab" field is automatically checked when the record is modified so that it can be tracked using the Chem Lab Tracking module (page 57). If you do NOT want to track this sample, deselect the "at Lab" box.

Collector: The name of the person who collected the sample.

Kit Order #: Unique number assigned to the schedule record if it is submitted in the electronic quarterly file (see Page 61).

Date Submitted (hidden field): A date stamp field that is not shown on this screen but is important in the process of submitting schedules to DCLS. When a record is submitted to DCLS, this field is populated with the date of submission. This date stays on the record until the user makes a change to the record or the record is electronically updated (see page 37). Its purpose is to prevent schedules with frequencies greater than 3 months from being re-ordered from DCLS due to a seemingly past due "next due date" because of lag time in receiving analysis results.

DCLS Quarterly Kit Orders:

Routine monitoring kit orders are submitted electronically to DCLS 60 days prior to the start of each quarter. Each district is responsible for reviewing their schedule to ensure that it is correct. (Review Schedule – Page 61).

Conditions that must be met to submit a schedule

1. Water System and Facility must both be active

2. The record must **not** be checked to exclude.

3. The Next Sample Date is in the quarter date range

   OR

   The Next sample date is blank or prior to the quarter start range and it is monitored monthly or quarterly (> 0 and <= 3 month frequency)

   OR

   The Next sample date is blank or prior to the quarter start range and it is monitored less frequently than quarterly (> 3 month frequency) and it does not have a "date submitted" date stamp.

Conditions that exclude a schedule from submission

1. Inactive Water System and/or Facility

2. Record is checked as excluded.

3. The Next Sample Date is later than the end of the target quarter

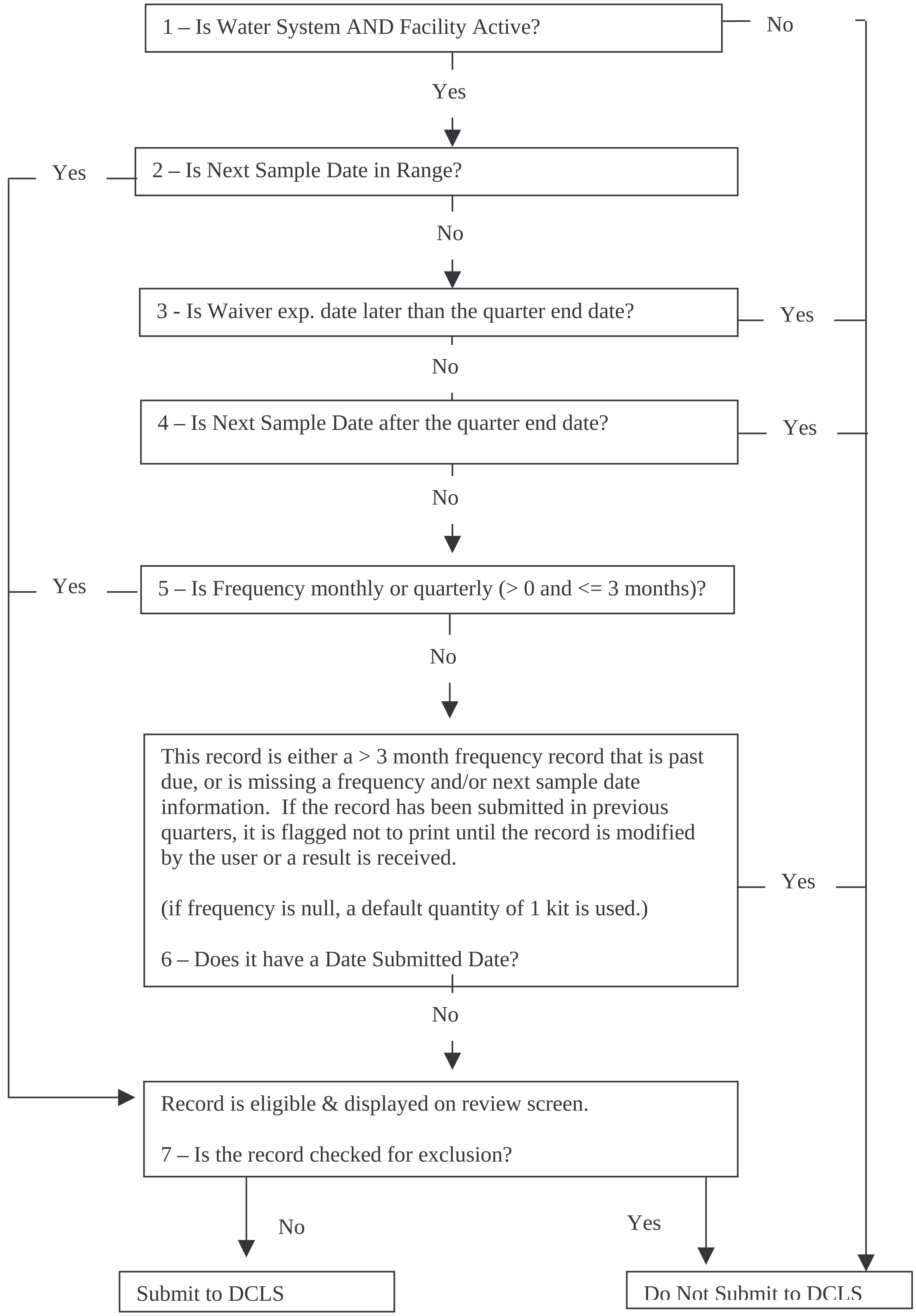
4. The Next Sample Date is null or prior to the beginning of the target quarter AND the waiver expiration date is later than the end of the target quarter.

5. The Next Sample Date is null or prior to the beginning of the target quarter AND it has a > 3 month frequency AND it has a "date submitted" stamp.

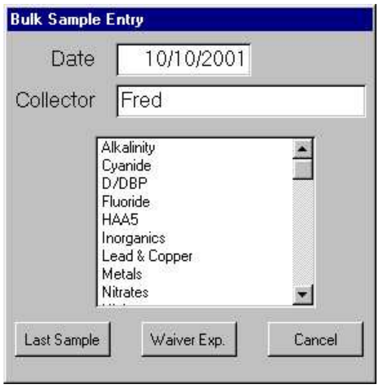
6. The Next Sample Date is null or prior to the beginning of the target quarter AND the Frequency is null.

The following flowchart illustrates these conditions

II. Individual Systems ➔ Chem Schedules



Bulk Entry: To enter multiple analyte groups at once, click the “Bulk Entry” Button to display the following form:



Enter the collection date in the “Date” field

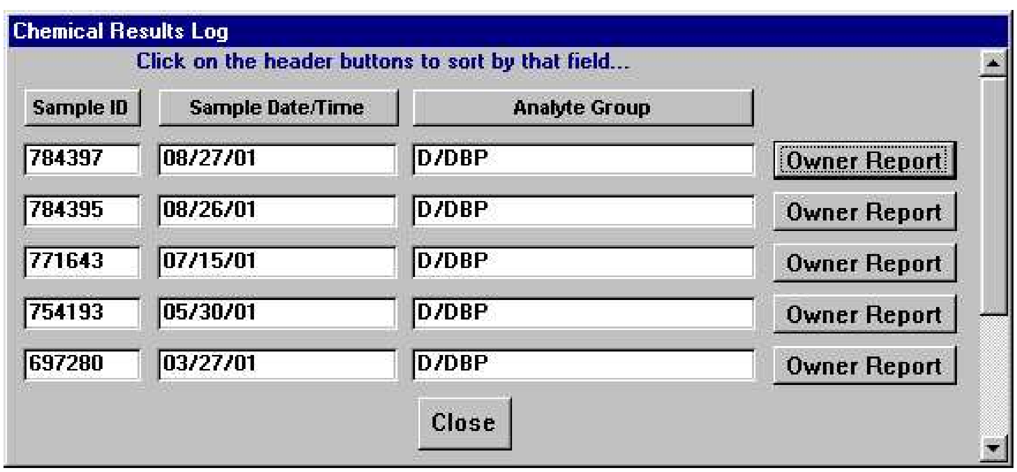
Enter the Collector Name

Select multiple analytes by using the control-click, shift-click combinations.

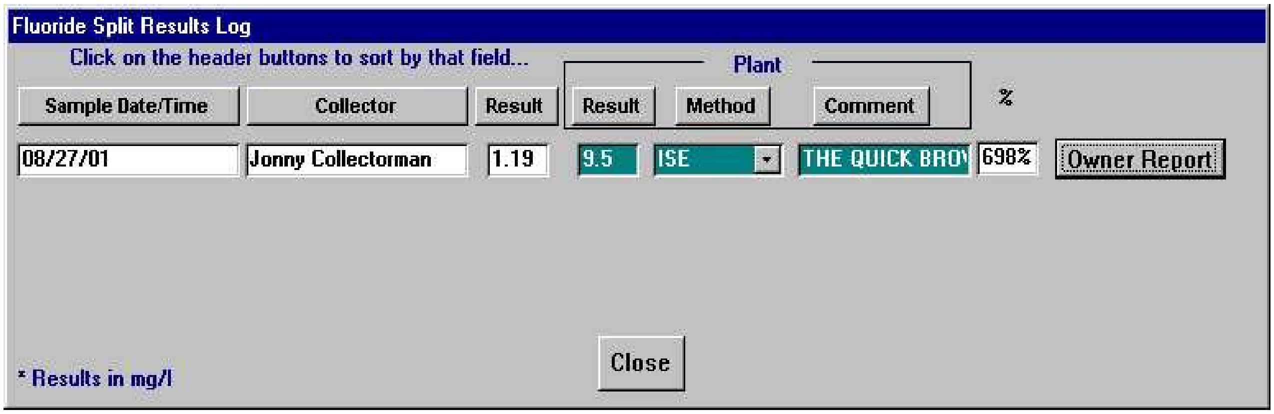
Click the “Last Sample” button to add all selected analytes to the schedule.

Enter multiple waiver expiration dates in the same manner. Collector name is not required. Click the “Waiver Exp.” button to add all selected analyte waver expiration dates to the schedule.

SDWIS History: Displays the results of scheduled samples that are in SDWIS. If results are not received into SDWIS electronically, they must be hand keyed into SDWIS. See WM 823. Fluoride split results will not be displayed from this button. An owner report can be generated from this screen. (See also page 66 for instructions on printing batches of owner reports).

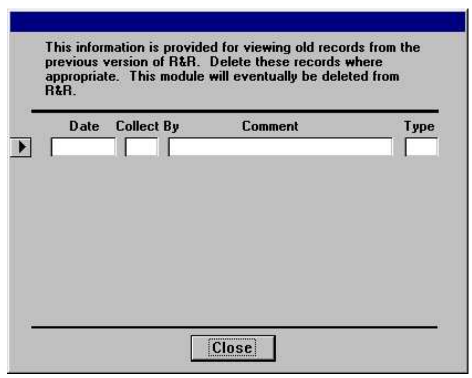


Fluoride Split: To view Fluoride Split results from SDWIS click the "F12 Split" button. These results are separated from the other chemical results so that the user can enter plant results from the split sample.



R&R History: This module provided to view legacy chemical results/schedules that were stored in R&R prior to storage in SDWIS. At that time, results were stored on the facility level (not sampling point). The form is filtered based on the analyte group the user has selected on the chem schedule form. If an analyte group is not selected (or there is not a schedule present at all) then all previous results/schedules will be displayed (unfiltered).

The data is read-only and can not be modified.



Automatic Updates:

When results are added into SDWIS (either electronically from DCLS or hand entered), the information is uploaded into R&R during the refresh procedure. The scheduler is then automatically updated with the pertinent result information as follows for ***Routine Compliance Samples or Fluoride Split Only***:

⇒ UPDATE: Scheduler records are paired with new sample results from SDWIS by Sampling Point ID and Analyte Group. The existing scheduler record is modified with the data from the sample result

Last Date	=	Collect Date (only if collect Date > Last Date)
Next Date	=	Collect date + Frequency (if frequency is null, this field is not updated.
At Lab	=	cleared (no)
Sample ID	=	LIMS #
Collector	=	Collector
*Date Submitted	=	cleared (Null)

⇒ REJECTED: SDWIS results that were set to a rejected status since the last refresh will be updated in the scheduler as follows:

Last Date	=	Null
Next Date	=	Current date
At Lab	=	cleared (no)
Sample ID	=	null
*Date Submitted	=	cleared (Null)
Comments	=	Sample ID "Was Rejected"

⇒ DELETED: If samples are deleted in SDWIS, the matching chem schedule record gets modified

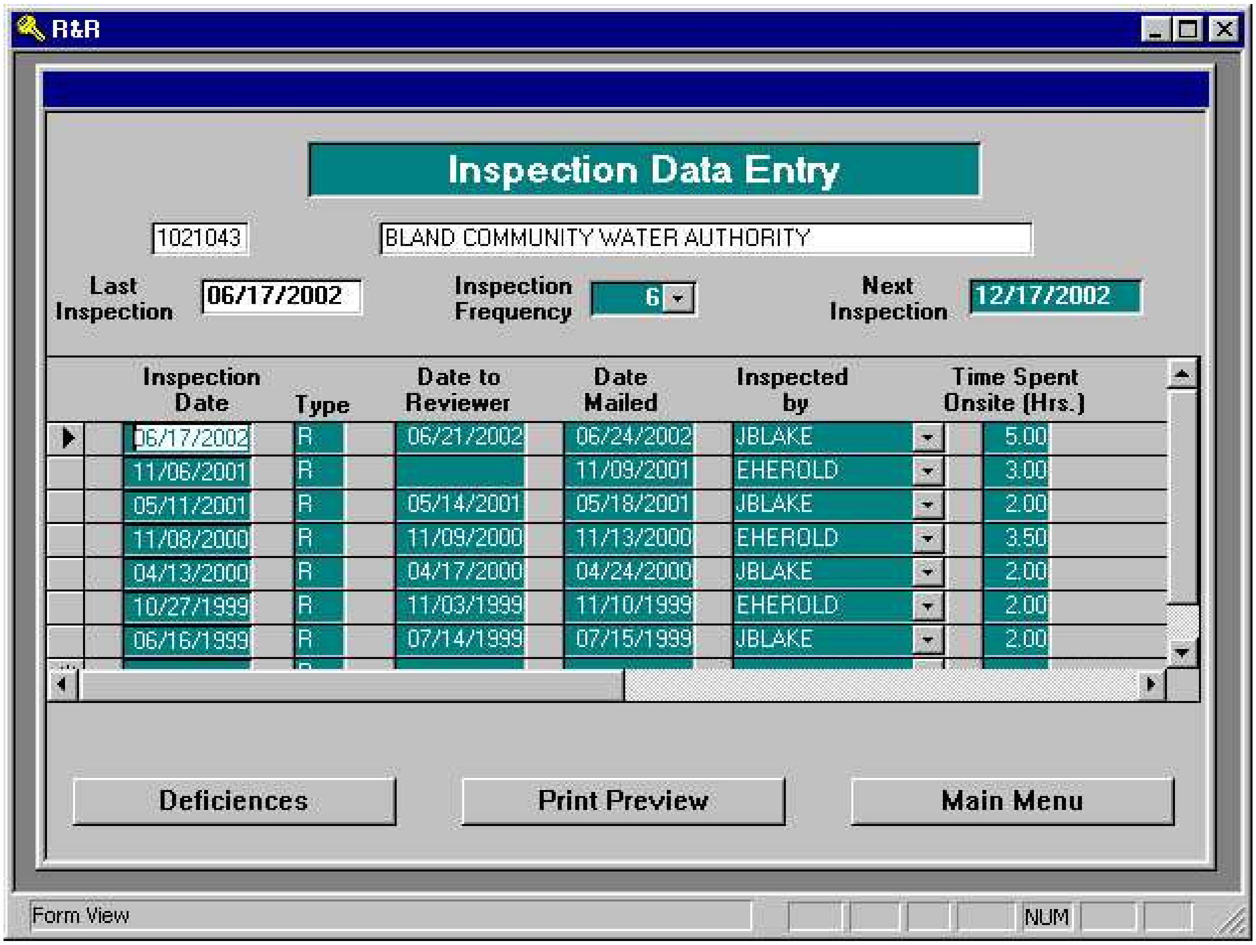
Last Date	=	Null
Next Date	=	Current date
At Lab	=	cleared (no)
Sample ID	=	null
*Date Submitted	=	cleared (Null)
Comments	=	Sample ID "Was Deleted"

⇒ APPEND: If matching scheduler records are not found, they are added and filled with the SDWIS Result record info:

Last Date	=	Collect Date
Frequency	=	Lookup default value for that analyte group
Next Date	=	Collect date + Frequency (if frequency is null, this field is not updated.
At Lab	=	cleared (no)
Sample ID	=	LIMS #
Collector	=	Collector
*Date Submitted	=	cleared (Null)

*Date Submitted is a system controlled field that is not visible from the R&R application. See Page 33 for further information.

Use of the Inspections module is MANDATORY.



Last Inspection: This field is read-only and is derived from the date of the last inspection on the row entry part of the form.

Inspection Frequency: The Frequency in months that the system should be inspected. Changing this value will recalculate the *Next Inspection* date based on the last ROUTINE (Type "R") inspection. Every time a new ROUTINE (Type "R") inspection row is added, the system takes the date of that inspection and derives the next inspection based on the frequency number.

Next Inspection: The date that the next inspection is due. Although it is a calculated field, it can be manually changed by the user.

Inspection Date: The date of the inspection. There may only be one inspection per day for each system.

Type: The Type is automatically set to "R" (Routine) when adding a new record, but this can be changed by the user. Other Types are: "C" (Complaint) and "S" (Special).

Date to Reviewer: The date the inspection left the inspector's desk and was given to another individual (*usually* the District Engineer). "Inspector" in this case is the individual who performed the inspection who may or may not hold the position of Environmental Inspector for the Division of Drinking Water.

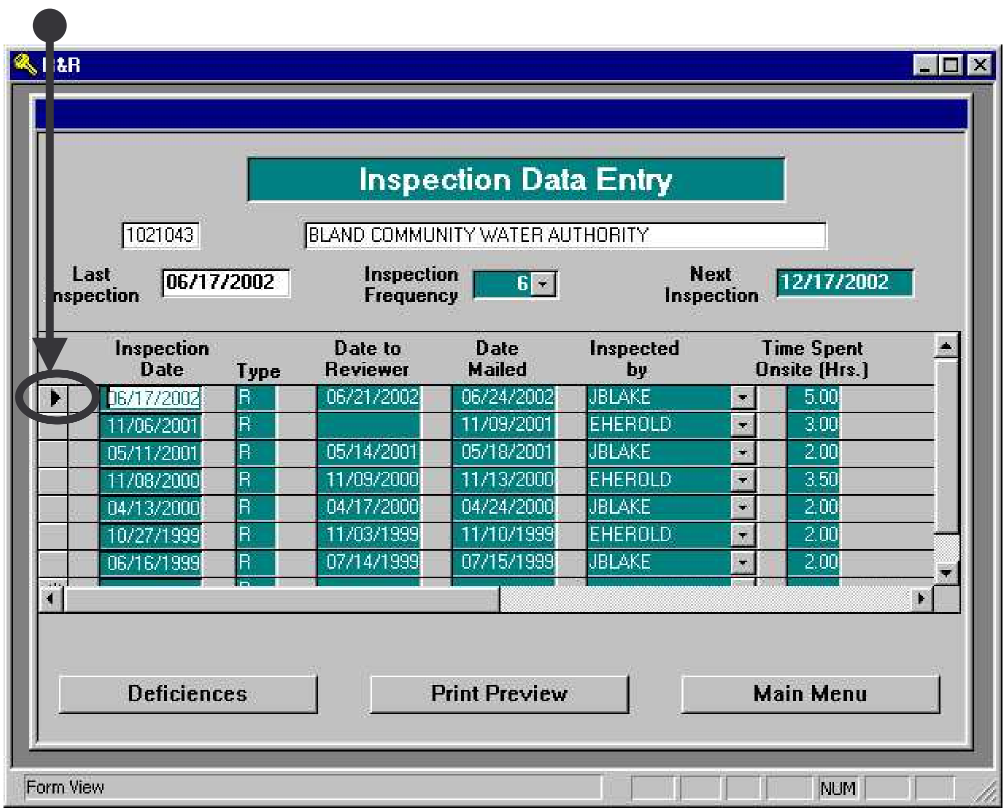
Date Mailed: The date the inspection was mailed.

Inspected By: The individual who performed the inspection who may or may not hold the position of Environmental Inspector for the Division of Drinking Water.

Time Spent Onsite (Hrs.): Enter time as fractional hours (ex: one hour and forty-five minutes should be entered as **1.75**) The total time including travel and preparation are tracked in other DDW applications.

Scroll Right to enter comments if desired.

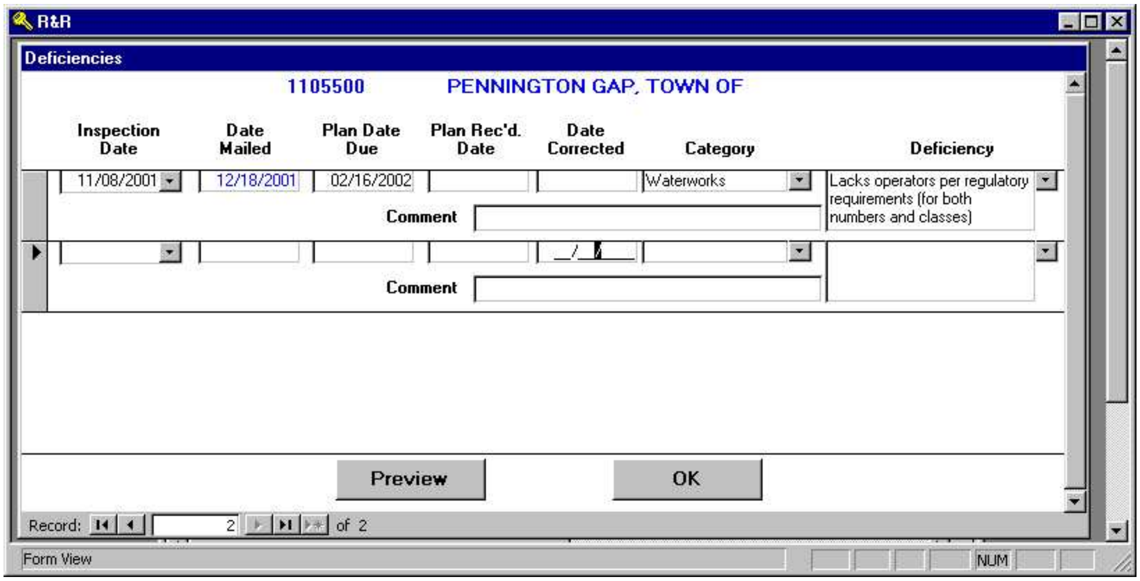
To delete an inspection, click the gray box to the complete left of the record's row. The box will then be shaded and the pointer arrow will turn from black to white. Press the DELETE button on your keyboard. You will be prompted for confirmation that you wish to delete the record before it is actually deleted.



Inspection information is transmitted to the Central Office every time the Field Office system administrator downloads results from the Central Office.

Preview: Reports the inspection history for the PWS. Additional reports for inspection data are *Next Inspection Due* (Page 64) and *Quick Look* (Page 12).

II. Individual Systems ➔ Inspections ➔ Deficiencies



Inspection Date: Select from the provided list of inspection dates entered in the Inspection Data Entry screen.

Date Mailed: The date the inspection was mailed. This is read-only and obtained from the Inspection Data Entry Screen.

Plan Date Due: The deadline date for the owner to submit a plan to correct a significant deficiency. The system sets a default date of 60 days past the Date mailed. User can change this value.

Plan Rec'd Date: The date the plan to correct a significant deficiency was received in the DDW field office.

Date Corrected: The date the corrective action was taken.

****The following fields must be entered by the user when the *Plan Date Due* field is populated.****

Category: Categories consist of the components that make up a waterworks per our sanitary survey/inspection form outline. Each component/category has a list of possible significant deficiencies as delineated in WM 851. Select the correct category to access the appropriate significant deficiency list.

Deficiency: This list is controlled by the Category list. All categories have "Other Significant" and "Non-Significant" deficiency types. These two types require the user to enter a comment. WM 851 allows staff to declare situations other than those listed in the WM as a 'significant deficiency.' The "Other Significant" choice allows staff to document the situation by populating the comment field. The "Non-Significant" deficiency option allows the staff to use the module as a tickler file to track and document, in the comment field, other situations of their choice. In addition, while the module is geared toward surface water waterworks with a conventional water treatment plant, it may be used to track groundwater waterworks situations. For example, a groundwater waterworks is given 30 days to respond to an item documented in an inspection report, such as 'submit a cross connection control program for review and approval within 30 days.' Use the "Non-Significant" deficiency and comment field to track the item. Use common sense to select an appropriate category.

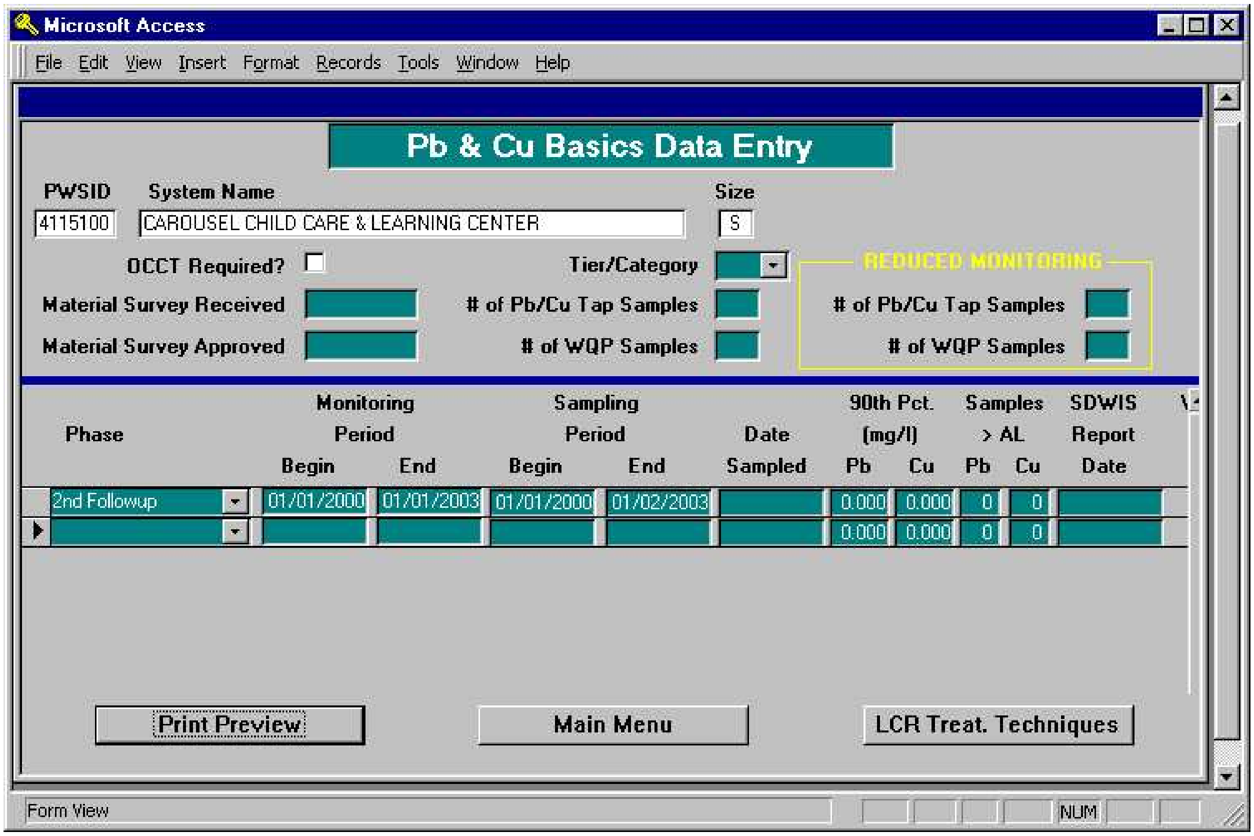
Comment: Required for "Other Significant" and "Non-Significant" deficiencies.

Preview: Displays the deficiency history for the individual system. Additional reports for deficiency data are on the District Systems tab (Page 63).

Lead and copper data is tracked by using this input screen. This data is reported by the *Pb and Cu* tab on the *Quick Look* screen (see page 14).

Use of the Pb & Cu Basics module is MANDATORY.

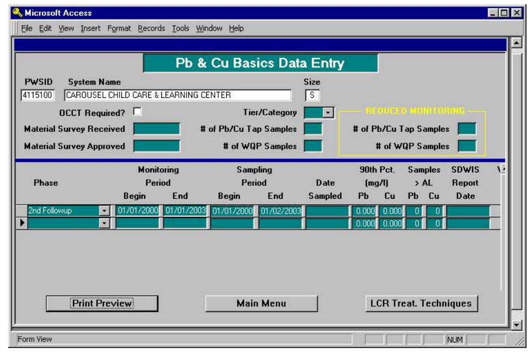
The *Print Preview* Button will display all Pb & Cu data for this system.



OCCT Required? Check if the waterworks is required to provide OCCT.

Material Survey Received: Enter appropriate date.

Material Survey Approved: Enter appropriate date.



Tier/Category: Enter the appropriate tier from the drop-down list in accordance with the approved material survey.

1A	Single family residences with 50% lead service lines and 50% copper pipe installed between 1983 and 1986
1B	Single family residences with some lead service liens and the remainder with copper pipe installed between 1983 and 1986
1C	All sites are single family residences with copper pipes installed between 1983 and 1986
2D	Some sites are single family residences with lead service lines and copper pipe installed between 1983 and 1986 with the remainder multifamily or public buildings with lead service lines and copper pipe installed between 1983 and 1986
3E	Single family residences with copper pipe installed after 1986. Can include some sites with lead service lines and copper pipe installed between 1985 and 1986.
F	Exceptional Cases – some sites with plastic pipes

# of Pb/Cu Tap Samples and **# of WQP Samples:** Enter number of samples (based on population) required for each during routine monitoring.

REDUCED MONITORING frame: # of Pb/Cu Tap Samples and **# of WQP Samples:** Enter number of samples (based on population) required for each during reduced monitoring.

Phase is the step within the waterworks' LCR monitoring program that corresponds to the Monitoring Period. Use the drop-down list to choose from the following: 1st Initial, 2nd Initial, 1st Annual Reduced, 2nd Annual Reduced, 3rd Annual Reduced, Triennial Reduced, 1st Followup, 2nd Followup, 1st Routine, and 2nd Routine.

In order for bottles due tracking to operate properly, each sample summary result is entered on two lines which include the green fields on the "top" line (results) and the yellow fields on the "bottom" line (future sample).

Monitoring Period is the date range (begin and end date) in which the waterworks next monitoring must occur. The monitoring period will be the same as the Sampling Period for Initial, Followup, and Routine monitoring. For Reduced monitoring, the monitoring period will encompass the Sampling Period. In either case, the end date for the Monitoring Period of the most recent record will be a future date since this is the current record for which the user is awaiting results. **See example below.** These monitoring periods must be limited to ranges of 6 months (1st Initial, 2nd Initial, 1st Followup, 2nd Followup), 1 year (1st Annual Reduced, 2nd Annual Reduced, 3rd Annual Reduced, 1st Routine, 2nd Routine) or 3 years (Triennial Reduced).

Phase	Monitoring Period Begin	Monitoring Period End	Sampling Period Begin	Sampling Period End	Date Sampled	90th Pct. (mg/l) Pb	90th Pct. (mg/l) Cu	Samples > AL Pb	Samples > AL Cu	SDWIS Report Date
1st Annual Reduced	01/01/2000	12/31/2000	06/01/2000	09/30/2000		0.000	0.000	0	0	
2nd Followup	07/01/1999	12/31/1999	07/01/1999	12/31/1999	12/15/1999	0.003	0.515	0	1	02/05/2000
1st Followup	01/01/1999	06/30/1999	01/01/1999	06/30/1999	06/09/1999	0.007	1.270	0	1	02/05/2000
1st Initial	07/01/1993	12/31/1993	07/01/1993	12/31/1993	10/05/1993	0.038	1.590	1	2	02/05/1994
*										

Screen print captured on 8/7/00

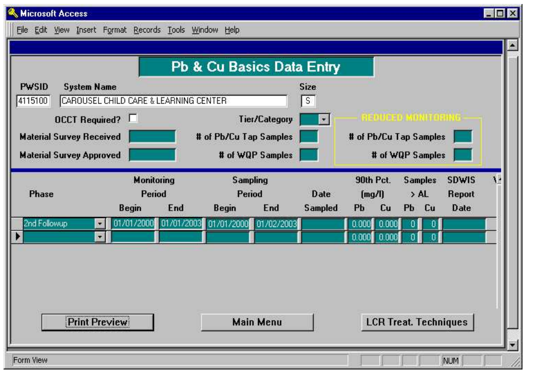
In the above example, the user is waiting for the results of the sampling which needs to be completed by 9/30/00. When those results are received, the user will input the date sampled, 90th pct. results, # samples exceeding ALs, date entered into SDWIS and other notes. Then, the user will create a new record at the bottom (*****) and complete the Phase, Monitoring Period, and Sampling Period for the next sample due. When this screen is revisited, the new record will be at the top waiting for the next results.

Sampling Period is the actual date range within the Monitoring Period that the sampling must be completed. This differs from the Monitoring Period in that the Sampling Period specifies when the samples must be collected. For example, a waterworks may have a Monitoring Period of Jan. 1, 2000 through Dec. 31, 2002, but the Sampling Period will be June 1, 2002 through September 30, 2002. For all non-"Reduced" phases, the Sampling Period will default to the Monitoring Period.

Date Sampled is the first date that a group of samples are collected.

90th Pct. (Pb and **Cu)** is the 90th percentile results for both Lead and Copper, respectively. Reported in mg/l. If the 90th percentile result is less than the method detection limit, then enter 0.001 mg/l for Pb and 0.1 mg/l for Cu.

If a result's Pb 90th percentile value is >0.015, it will automatically be added to the Public Education tracking module of the treatment techniques screen.



Samples > AL (Pb and **Cu)** is the number of samples collected during the given Sampling Period which exceeded the action level for both Lead and Copper, respectively. This information must be reported in the Consumer Confidence Reports.

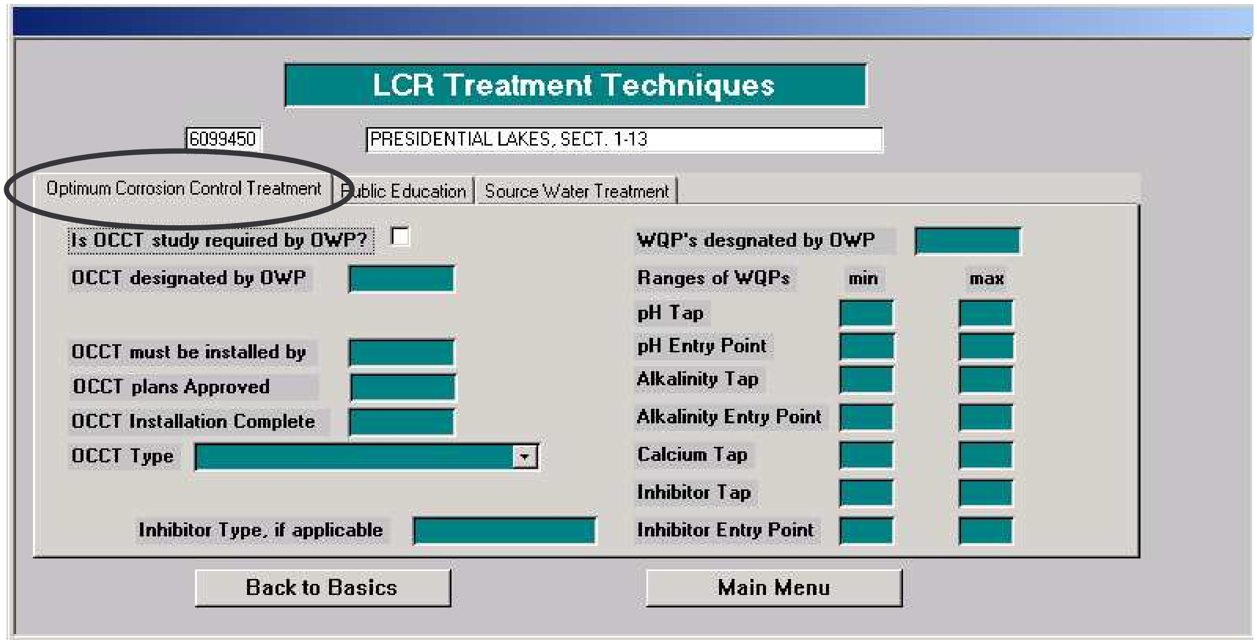
SDWIS Report Date - the date that results were reported in SDWIS for the given Sampling Period.

WQP Samples Received - the date of receipt of those samples, if required.

Comments can be used for any notation necessary to assist the user**.**

Optimum Corrosion Control Treatment (OCCT)

Is OCCT study required by OWP? Check if yes.



OCCT designated by OWP: Enter date of letter notifying waterworks owner of OWP's designation of OCCT.

OCCT must be installed by: Enter appropriate date.

OCCT plans Approved: Enter appropriate date.

OCCT Installation Complete: Enter appropriate date.

OCCT Type: From the drop-down list, select one of the following: pH and Alkalinity Adjustment, Calcium Hardness Adjustment, Addition of Phosphate of Silicate Inhibitor, or pH Adjustment Plus Inhibitor Addition.

Inhibitor Type, if applicable: Enter the type of corrosion inhibitor utilized (e.g., Zinc Hexameta-phosphate, Blended Phosphate, Aqua Mag, etc.)

WQP's designated by OWP: Enter the date when the WQP parameters were established by the OWP (after desktop study subsequent to installation of OCCT), if appropriate.

Ranges of WQPs: Enter the appropriate Min. and Max. values established by OWP for the listed parameters in mg/l (with the exception of pH). If only minimum values were established leave the Max. fields blank.

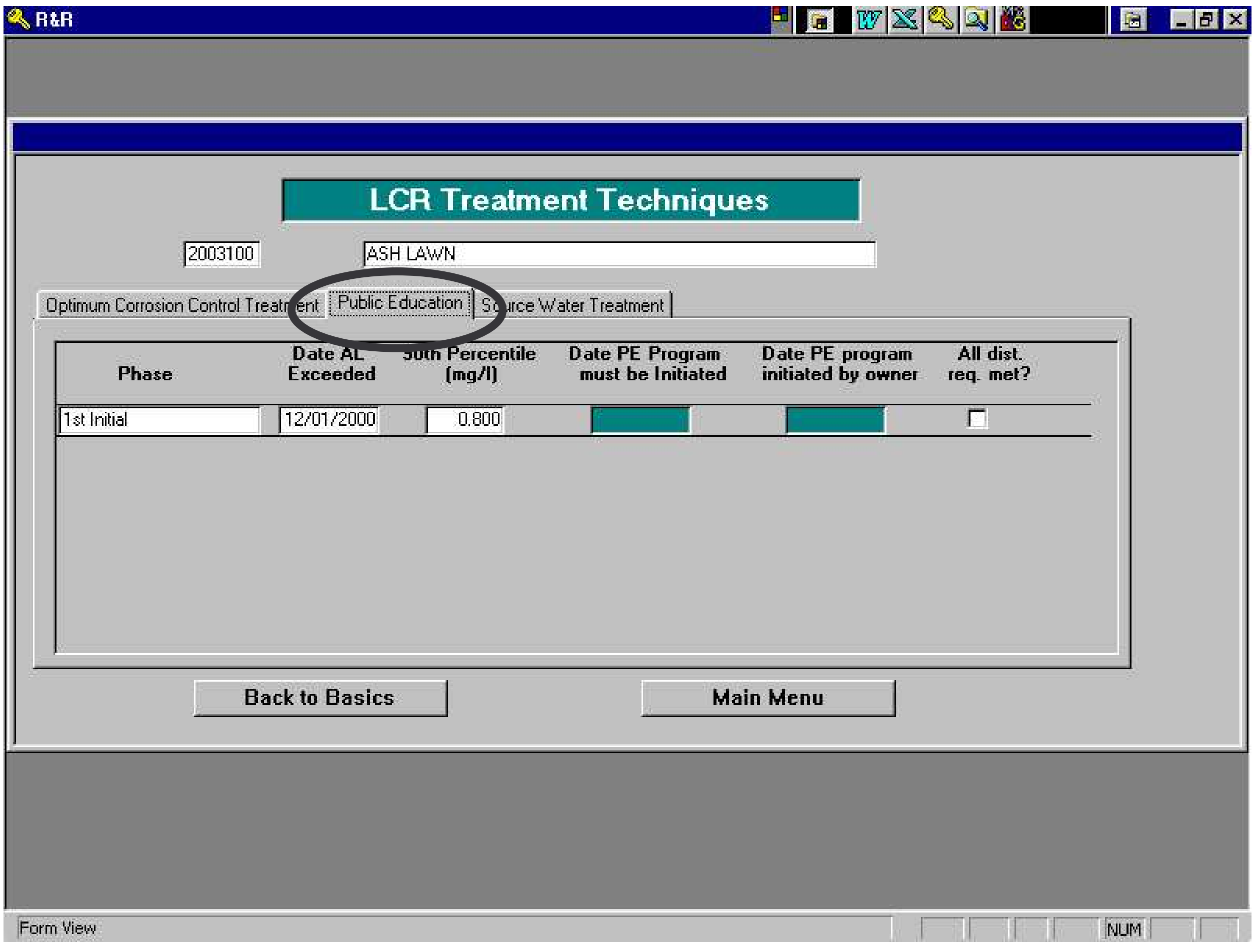
II. Individual Systems ➔ Pb & Cu Basics ➔ LCR Treatment Techniques ➔ Public Education

Phase, Date AL Exceeded, and 90th Percentile are pre-filled when the lead AL is exceeded.

Date PE Program must be Initiated: Enter appropriate date. (60 days after exceeding the lead AL)

Date PE Program initiated by owner: Enter appropriate date.

Check last column when certification is received that **All Distribution Requirements have been met.**



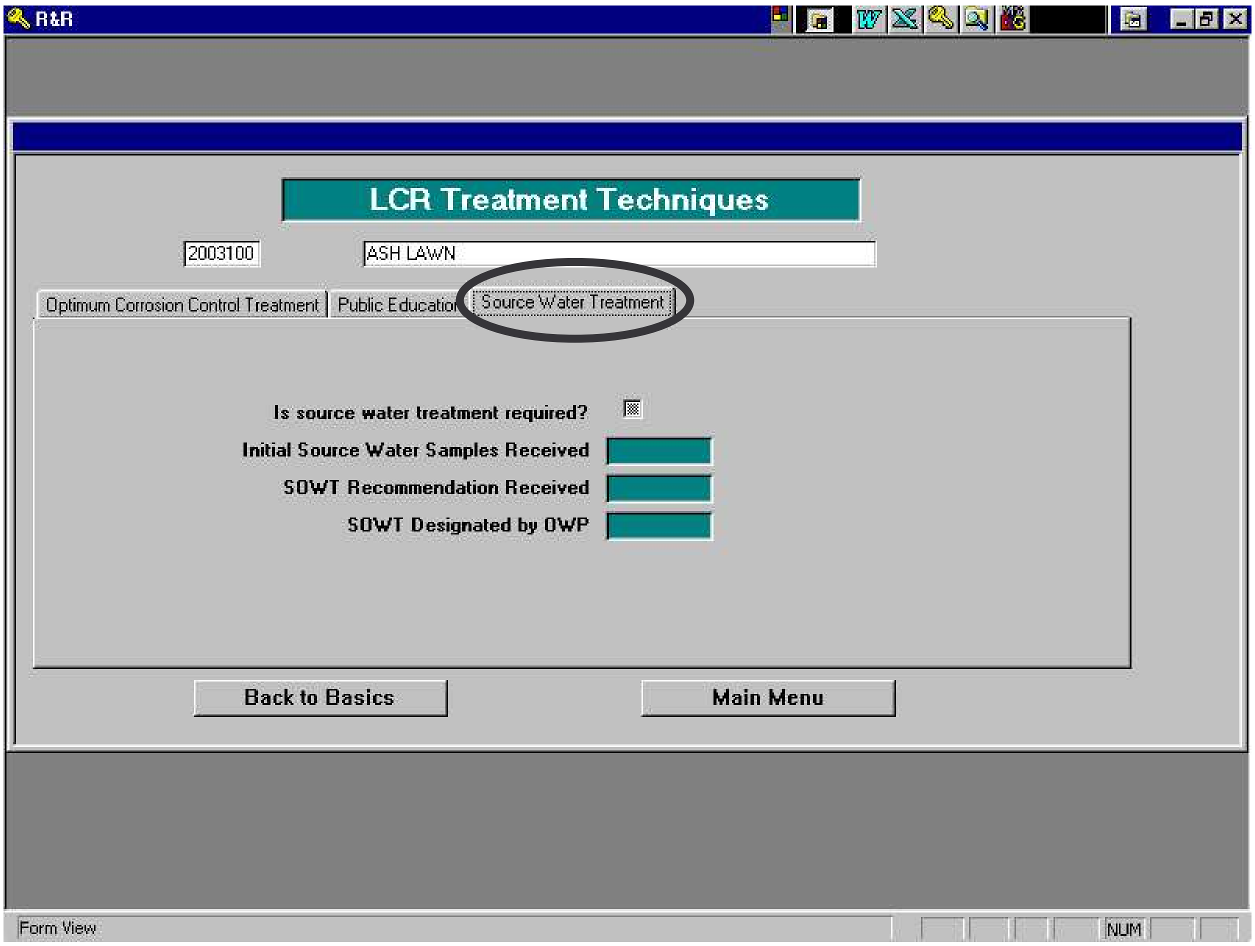
Source Water Treatment (SWT)

Is source water treatment required? Check if yes.

Initial Source Water Samples Received Enter appropriate date.

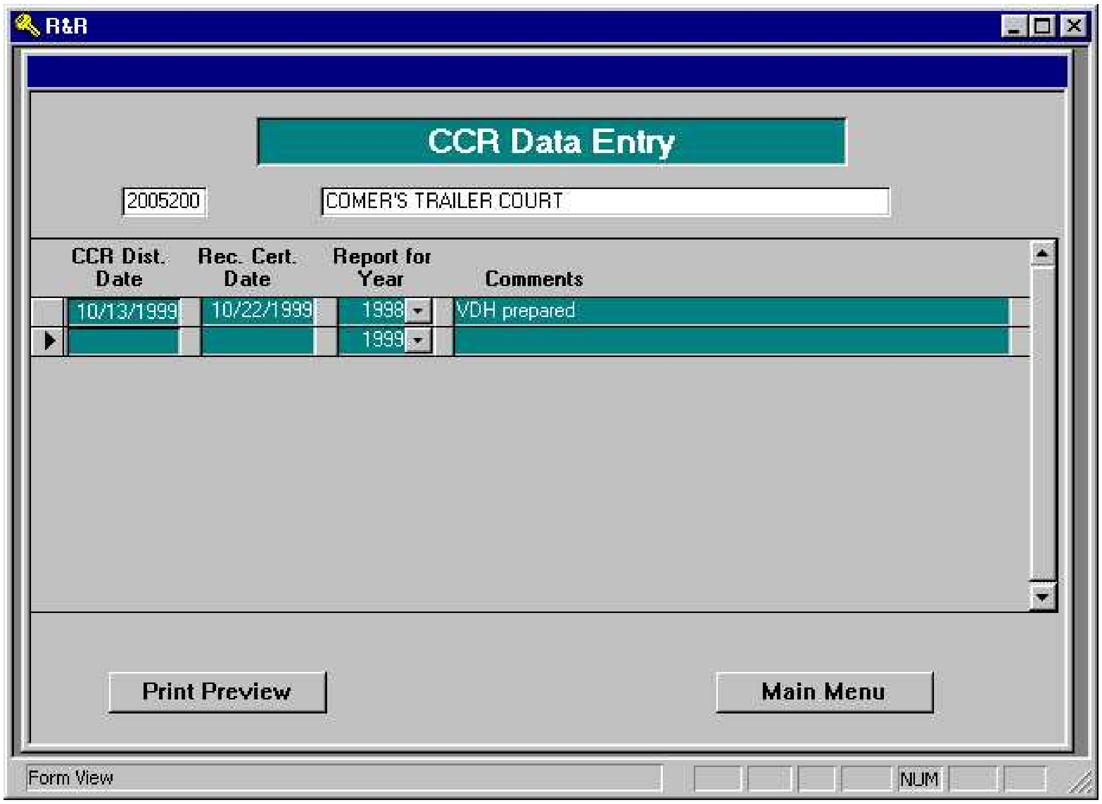
SOWT Recommendation Received Enter date owner submits source water treatment plan.

SOWT Designated by OWP Enter date SOWT plan accepted by OWP.



Note: A data screen is not provided for the Lead Service Line replacement treatment. According to reports from the Field Offices, Virginia does not have waterworks that will be required to replace lead service lines under the Lead & Copper Rule.

Use of the CCR Module is MANDATORY.



CCR Dist. Date: the date that the CCR was distributed to the consumers.

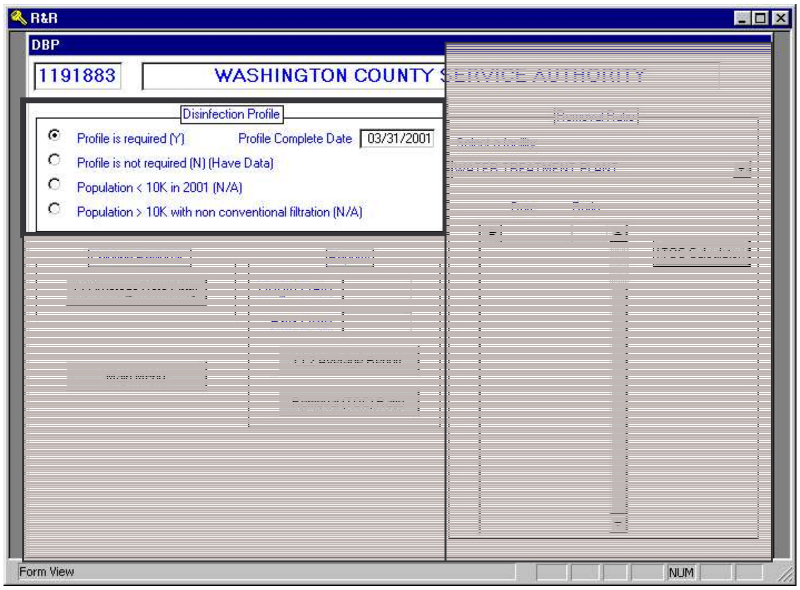
Rec. Cert. Date: the date that the CCR certification form was received by DDW.

Report for Year: Year of the data reported in the CCR. (*Usually* the previous year.)

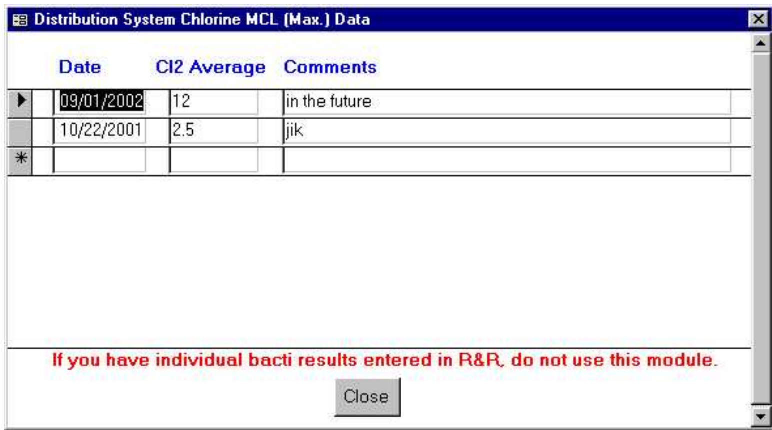
Comments: words entered by the user to assist the user in managing the CCRs
The *Print Preview* button will display all CCR information for this system. Additional reports for this data are in Quick Look (Page 11).

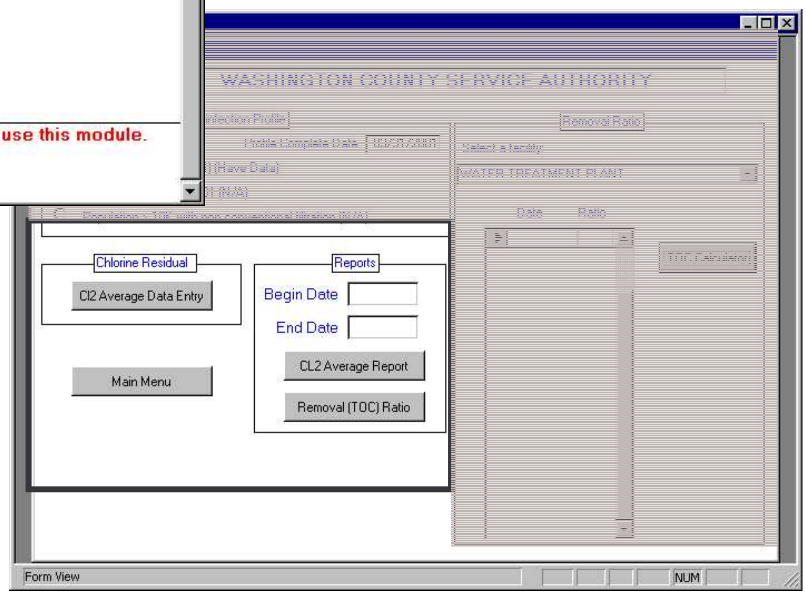
II. Individual Systems ➔ Disinfection By Products (DBP)

Disinfection Profile: Select the appropriate disinfection profile, the “Profile complete date” field is only available if “Profile is required” is selected.



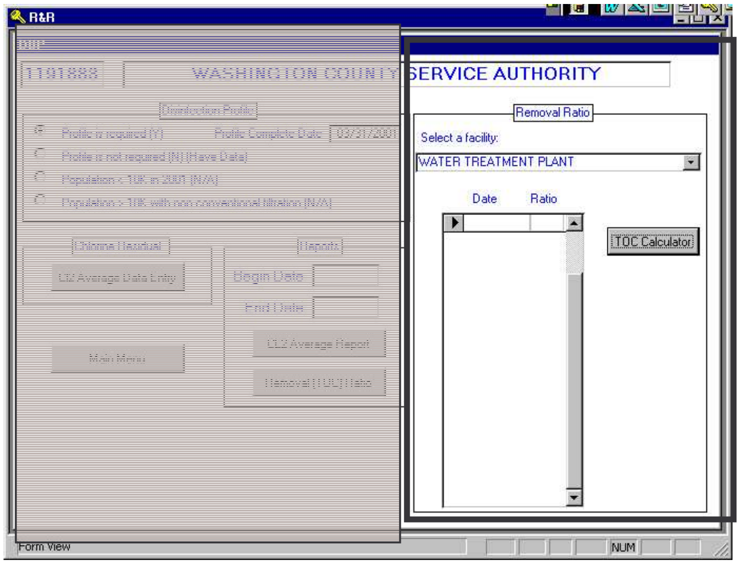
CL2 Average Data Entry: Use this module to enter average Chlorine MCL data. If a system has individual bacti reports with CL2 data (page 30), do NOT USE this module. The Quick Look DBP reports (Page 21) and the CL2 Average report in this module will use data from this module and the bacti results module. If results are entered in both places, the averaging reports will be incorrect.





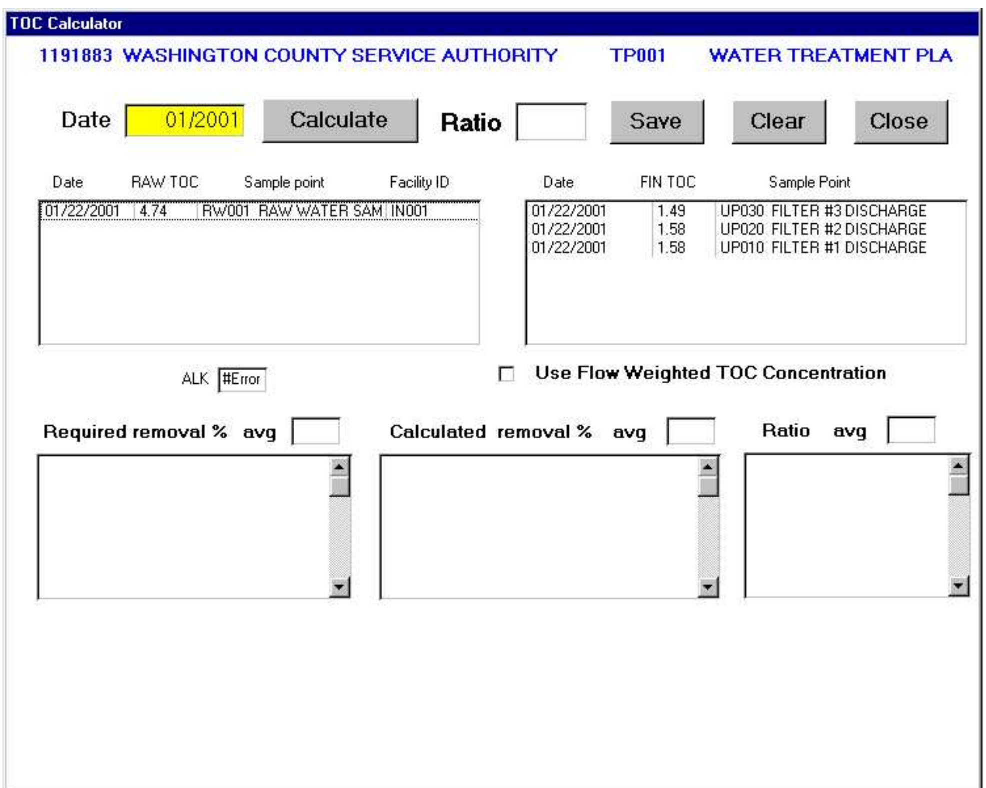
CL2 Average Report: The same report as the Quick Look DBP CL2 Detail report (Page 21) for an individual system. Only systems that are required to disinfect are included. This field can be found on the System Data – Basic screen (Page 23) or Bacti Result screen (page 30).

Removal (TOC) Ratio: Reports data entered into the Removal Ratio section of this module. The same report as the Quick Look DBP TOC report (Page 21) for an individual system.



Removal Ratio – Manual: Removal ratio is calculated on the facility level. You must select a facility (typically the TP) to enable the data entry section of this module. If you manually calculate the removal ratio, enter the date and value here. You may only enter one value per month per facility. If you use the TOC Calculator to calculate the removal ratio, the results will be stored here when the *SAVE* button is clicked in the calculator.

Removal Ratio - TOC Calculator

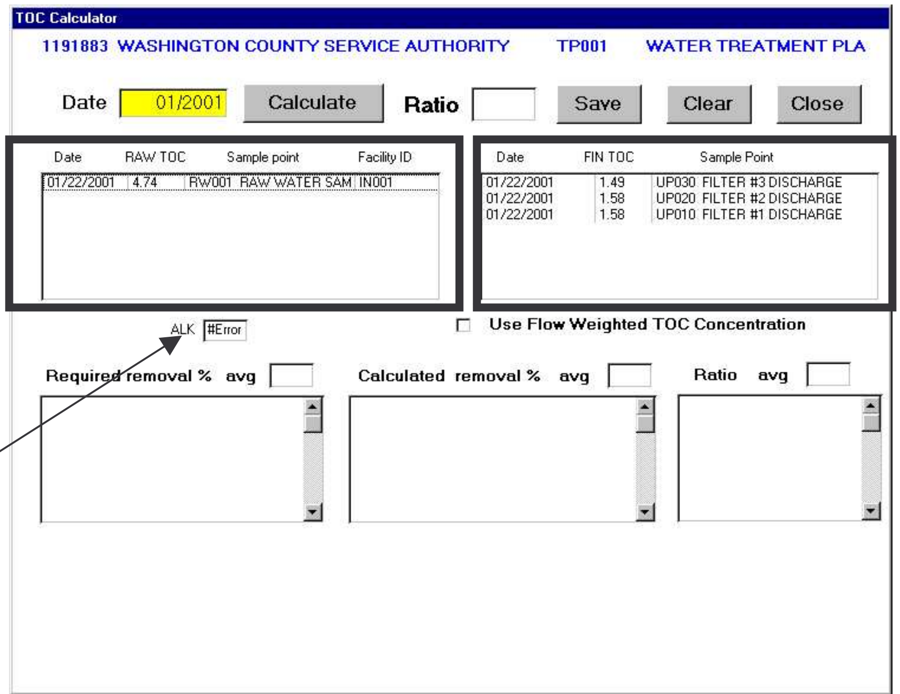


To use this calculator, TOC and Alkalinity results must be entered into SDWIS. The PWS must also have Raw and Finished sampling points. See WM 823.

Based on a user entered date, applicable results will be displayed for selection. System calculates required removal percentage and average, calculated removal percentage and average, ratio and ratio average according to the DBP rules and user selected Raw and Finished pairs.

Date: Enter a month/year and press the ENTER button.

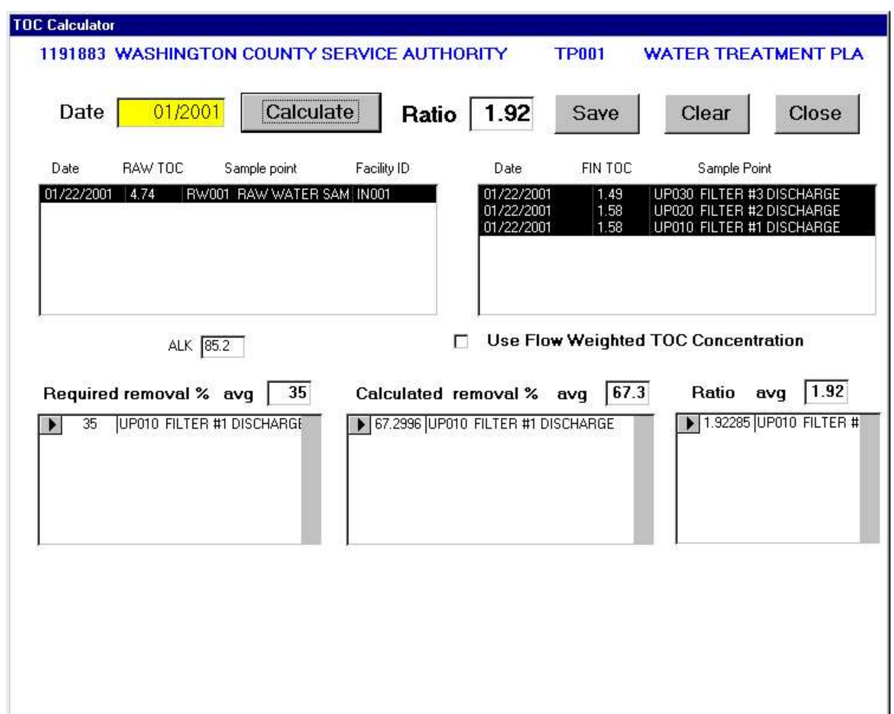
TOC results for <u>all</u> raw sampling points in the month/year for the PWS will display in the left box.



TOC results for all finished sampling points for the *selected facility* in the month/year for the PWS will display in the right box.

Alkalinity result displays when a raw sample is highlighted.

Matched Pair: User creates a matched pair by highlighting one raw result on the left and highlighting one or more finished results on the right. Once the *Calculate* button is pressed, the percentages and averages will display in the appropriate boxes at the bottom of the screen



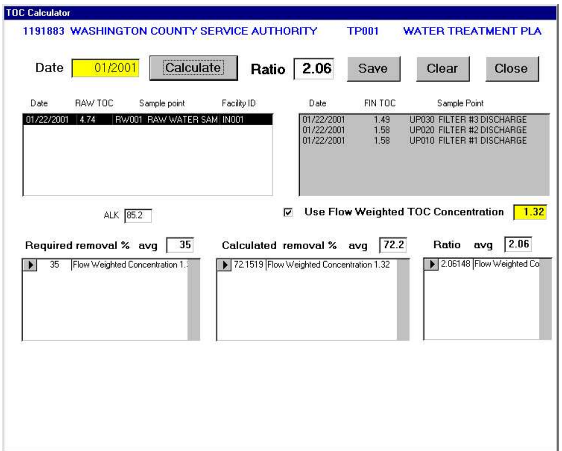
Continue to match and calculate pairs for the month/year period.

You must click the ***SAVE*** button to record the final results to the DBP main screen.

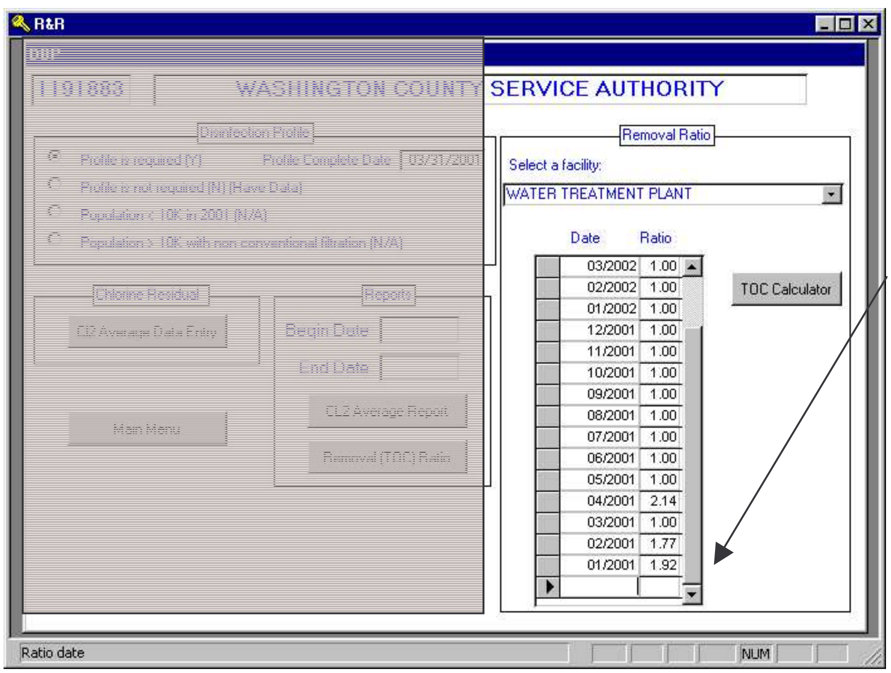
After saving results for the first month/year, the next month/year can be calculated by changing the date in the date field.

Use the *CLEAR* button to remove all calculations for the current session if you want to start the calculations over.

Flow Weighted TOC Concentration: An alternative to using the actual finished water results.



When the flow weighted TOC option is used, the finished TOC box is disabled and a yellow input box appears. A raw result must still be selected and a weighted concentration must be entered for the averages and percentages to be calculated.

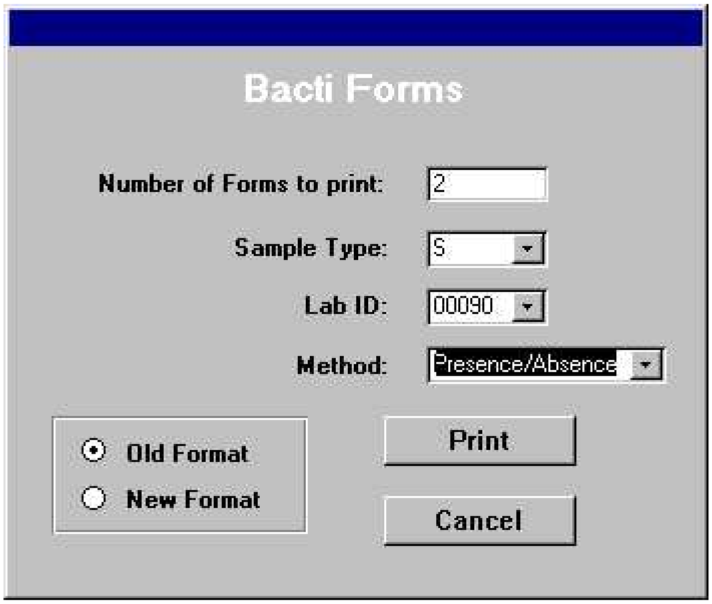


The ratio calculated by the TOC calculator is recorded on the main DBP page and can be edited from here, if desired.

Additional reports for this module are located Quick Look (see page 21).

II. Individual Systems ➔ Bacti Forms

Bacti Forms – Generates bacti sampling forms for *existing systems*. New well development samples should be ordered from the Chemical Forms procedure (Page 58). Special orders can also be placed by using the “Ad Hoc” application – see your system administrator for access to this application.



Number of Forms to Print – The number of forms to print

Sample Type – Select the appropriate type

X	Resample	P	Plant Tap Sample
S	Special Sample	D	Regular Distribution
R	Repeat Sample	Q	Raw Water

Lab ID – Defaults to the lab which services the county assigned to the PWSID. Users may manually change this value for the print job.

Method – Options are dependent on the lab selection. Richmond and Shenendoah have select lists. The other labs are text entries.

Old Format – Refers to the layout of the bacti form. These forms do not have red lettering.

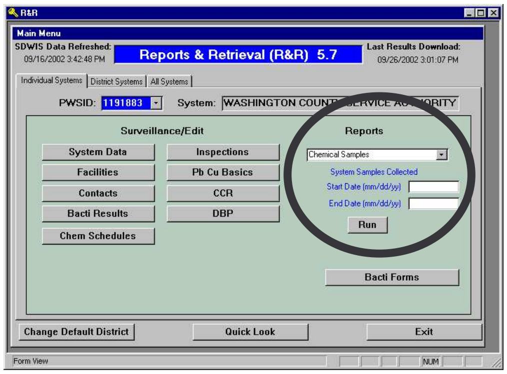
New Format – The new layout of the bacti form as created by DCLS. These forms have red lettering and gray boxes.

Print – Sends the information to the bacti printer.

Cancel – Closes the form without generating forms.

II. Individual Systems ➔ Reports

The following reports can be selected from the Reports pick list. For reports which require it, a date range criteria will be displayed below the pick list.



Bacti Results – Reports bacteriological results for a user entered date range.

Chemical Samples – Reports all chemical sample results in SDWIS for a user entered date range.

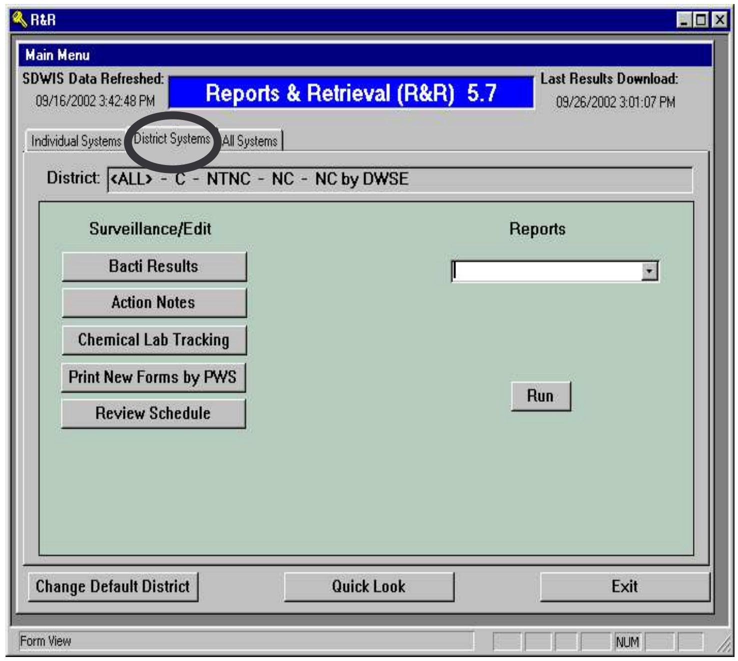
Chemical Schedule – Reports all chemical schedules.

CL2 Averaging Report – Reports chlorine residual values for all bacteriological results for a user entered date range. Provides monthly, quarterly and 4 quarter averages.

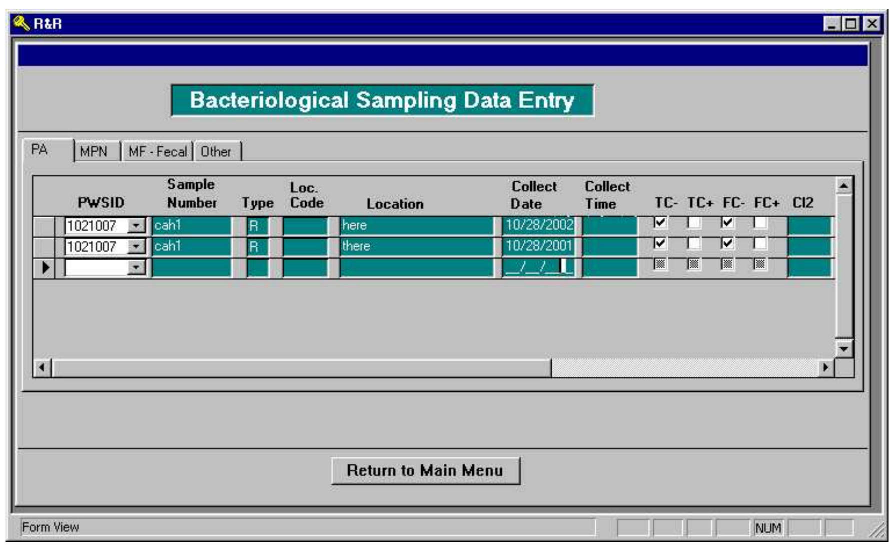
System NOV – Reports violations and enforcement actions entered in SDWIS.

III. District Systems ➔ Bacti Results

The display box at the top of the screen shows the filtering option set for the default district. To change the group of records to work with, use the Change Default District button (See Page 6). All reports and buttons on this screen return data limited to the filtering option.



Bacti Results – This screen mimics the layout of the **Bacti Results** screen on the Individual Tab (See Page 30). Use this screen to manually enter results that are not electronically provided from participating labs. Samples are unique by the combination of sample number, collection date year, and lab number. Duplicate samples are not permitted. If you attempt to enter a duplicate sample, you will be warned and forced to make a change before the record is saved. You can cancel any changes before the record is saved by pressing the esc button (twice) on your keyboard.

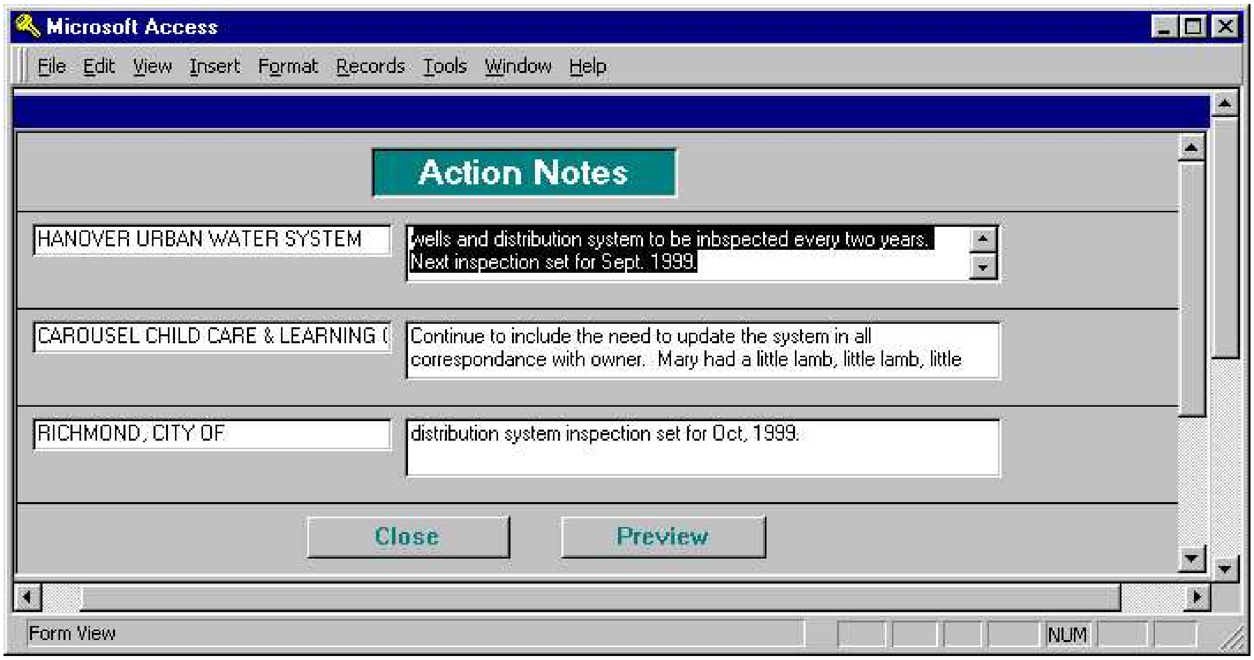


Make sure that you are on the appropriate method tab before adding a result. You MUST provide a result OR a reject reason for each sample.

After saving changes and exiting this screen, results can be viewed or edited through the **Bacti Results** screen on the Individual Tab (See Page 30).

III. District Systems → Action Notes

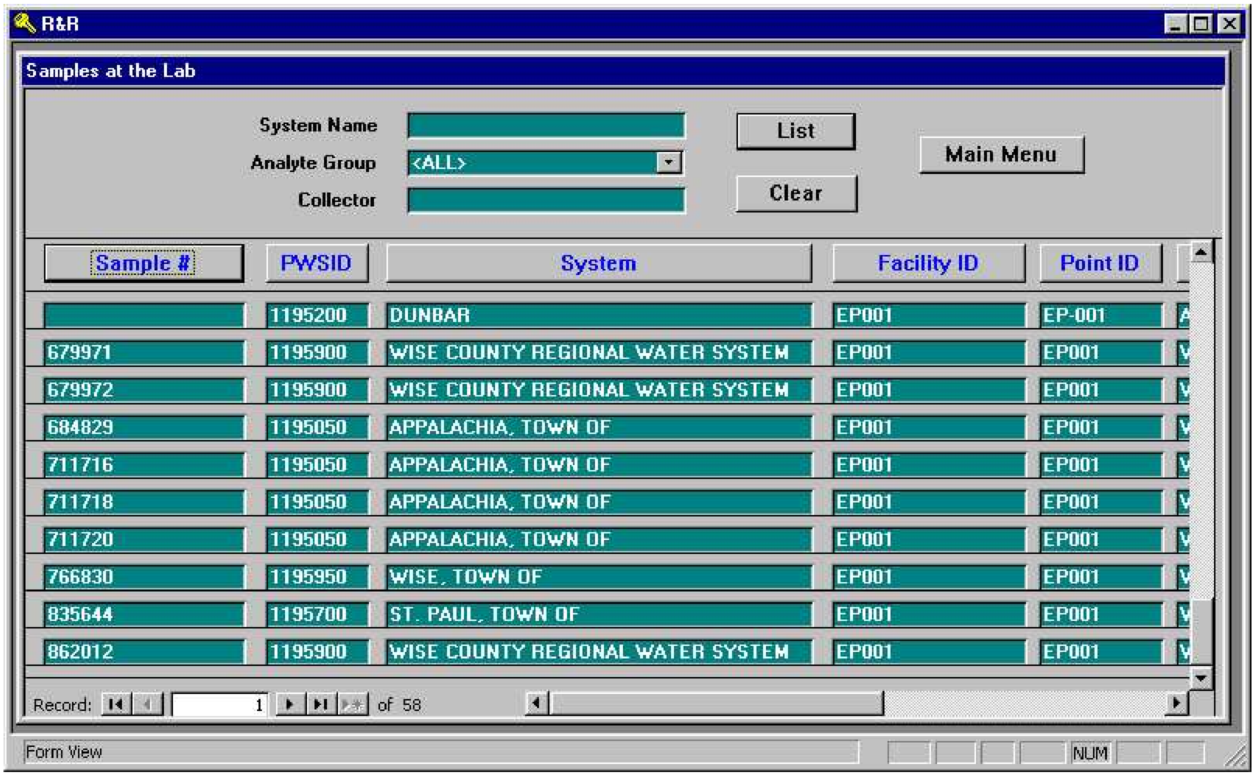
Displays all action notes for all systems in the default area. Action notes are entered for each system through the **System Data** button on the Individual Tab of the Main Menu (See Page 24).



III. District Systems ➔ Chemical Lab Tracking

This module is used to view chemical samples that have been taken by field office staff and are awaiting results from the lab.

When users manually enter sample collection data into the Chemical Schedules module (page 31), the record is flagged to be tracked by automatically checking the “at Lab” box.



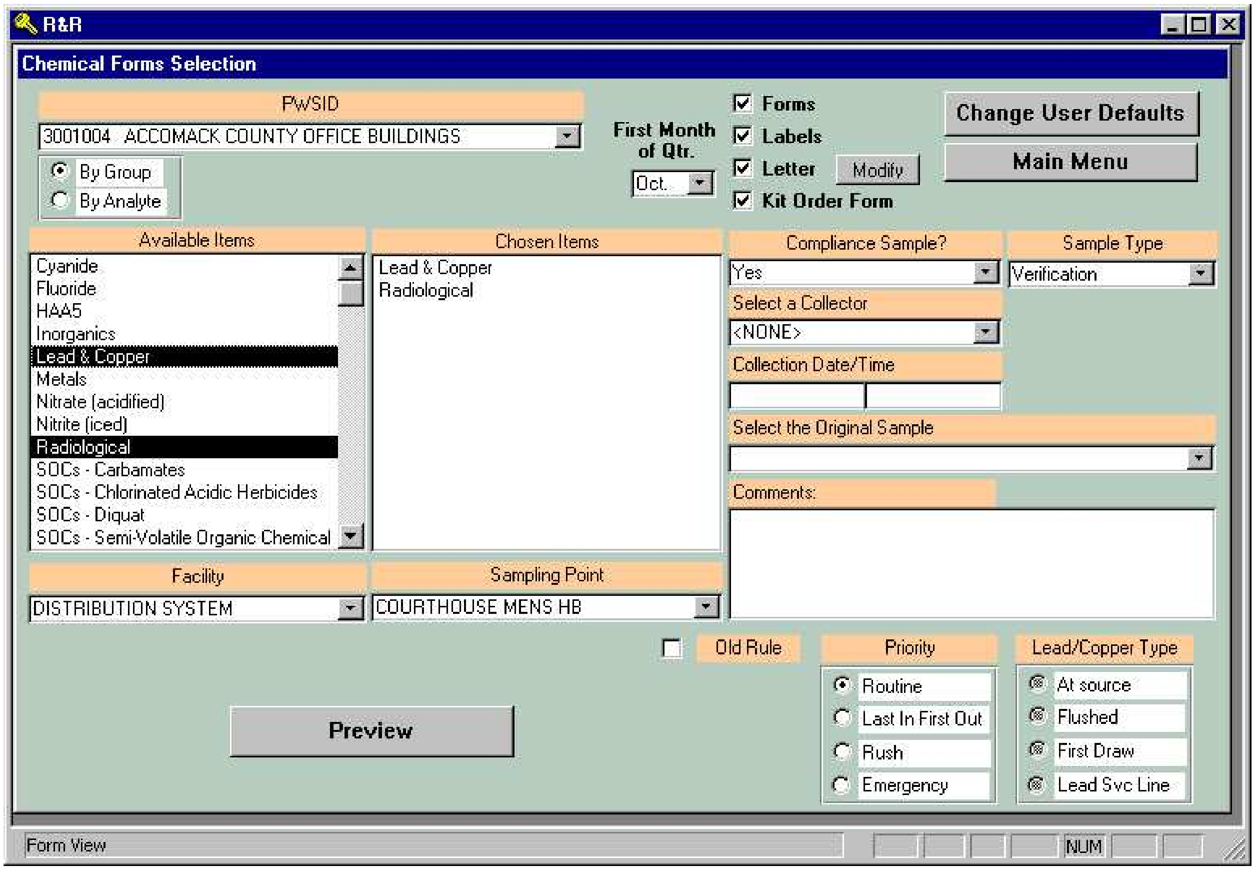
The list can be filtered by “System Name”, “Analyte Group”, “Collector” or any combination of the three. Full entry in the System Name and Collector fields is not necessary, the filter will look at what is entered and assume wild cards for anything subsequent. Example: entering the letter “B” in the System Name box will return all systems that begin with the letter “B”. Click the “List” button to display results that match the criteria. Each column header is a sort button that can be clicked to re-order the list by the selected column.

When the results are received electronically from the lab, the chem schedule is updated with the result information and the “at lab” flag is removed, thereby removing it from this list.

To manually remove a collection sample from this list, de-select the “at lab” box on the Chem Schedule Screen (Page 31).

Scroll Right to see additional information.

III. District Systems ➔ Print New Forms by PWS



NOTE: Not all elements are visible at all times. Some are dependent on criteria selections.

PWSID – Lists PWSIDs for the user's default setting.

By Group – Displays lists of kits to order in the "Available Items" box.

By Analyte – Displays the "Choose an Analyte Group" drop list to select a group.

Choose an Analyte Group (Drop list) – Available when "By Analyte" is selected. Displays all kit groups.

Available Items – If "By Group" is selected, all available kit groups will be displayed. If "By Analyte" is selected individual analytes that comprise the selected kit group in the "Choose an Analyte Group" drop list are displayed.

Multiple items can be selected using the shift-click or control-click selection method. Selected items will be displayed in the "Chosen Items" box.

Chosen Items – Displays all items selected from the "Available Items" box.

Facility – Lists facilities for the selected PWSID. A facility must be selected to generate documents.

Sampling Point – Lists Sampling points for the selected PWSID and/or Facility. If the Facility selection is <ALL>, all sampling points for the PWSID are displayed. Once a point is selected, the appropriate facility will be displayed. If a facility is selected, only points associated to that facility will be displayed. A sampling point must be selected to generate documents. "<None>" is an acceptable choice. Choosing this option permits that sampler to write in the location at the time of sampling. If this procedure is followed, a new sample point will be created in SDWIS when the result is received electronically.

Input Forms – Generates a chemical input form. Lead & Copper and Fluoride Split forms vary slightly in design. See “Special Features” later in this section. Only print one form per facility. For example, if 5 lead and copper samples are due on different sample points, and the points are not selected individually (user selects <none> as the sample point), only print the form once. A kit order form should be printed and a quantity of 5 written beside the appropriate kit.

Labels – Generates labels for sample bottles.

Letter – Generates a reminder letter.

> **Modify –** Opens the reminder letter in MS Word for editing. Only the standard verbiage of the letter can be customized. The letter can also be exported to MS Word from the preview screen for complete modification or storage.

Kit Order Form – The standardized DCLS order form. Kit selection and quantities must be completed by-hand after the form is printed. ***Bacti kits for New Well Development samples are also ordered on this form.***

First Month of Quarter – Drop list of the first month of each calendar quarter. Required and visible for Letters and Kit Order Forms.

Change User Defaults – Controls which systems are available in the PWSID drop list. See page 6.

Compliance Sample? – Select “yes” if sample is to be used for compliance.

Sample Type– Select the type of sample. Confirmation, Special, Complaint, and Verification samples require the selection of a priority. See below.

> **Priority–** This option box is displayed for the following sample types: Confirmation, Special, Complaint, Verification. This information is important for timely processing by DCLS.
>
> **Select the original sample –** This option box is displayed for the following sample types: Confirmation, Verification. A list of previous samples recorded in SDWIS for this sample point will be displayed for selection by user.

Select a Collector – Lists all SDWIS Legal Entities that are flagged as “collectors” See WM 823 for further information. Choose “<None>” if the name of the person to collect the sample is unknown. You may also type a name that is not provided in the pick list.

Collection Date/Time – Only to be completed if the sample has already been taken by field office staff.

Comments – Additional comments for processing the request. Comments appear on the input form only. If individual analytes are selected, they are automatically listed here. Do not delete the text that is automatically entered as it is a requirement of DCLS. You can add additional comments after the automatically entered text.

Preview – Displays all selected documents in print preview.

Special features:

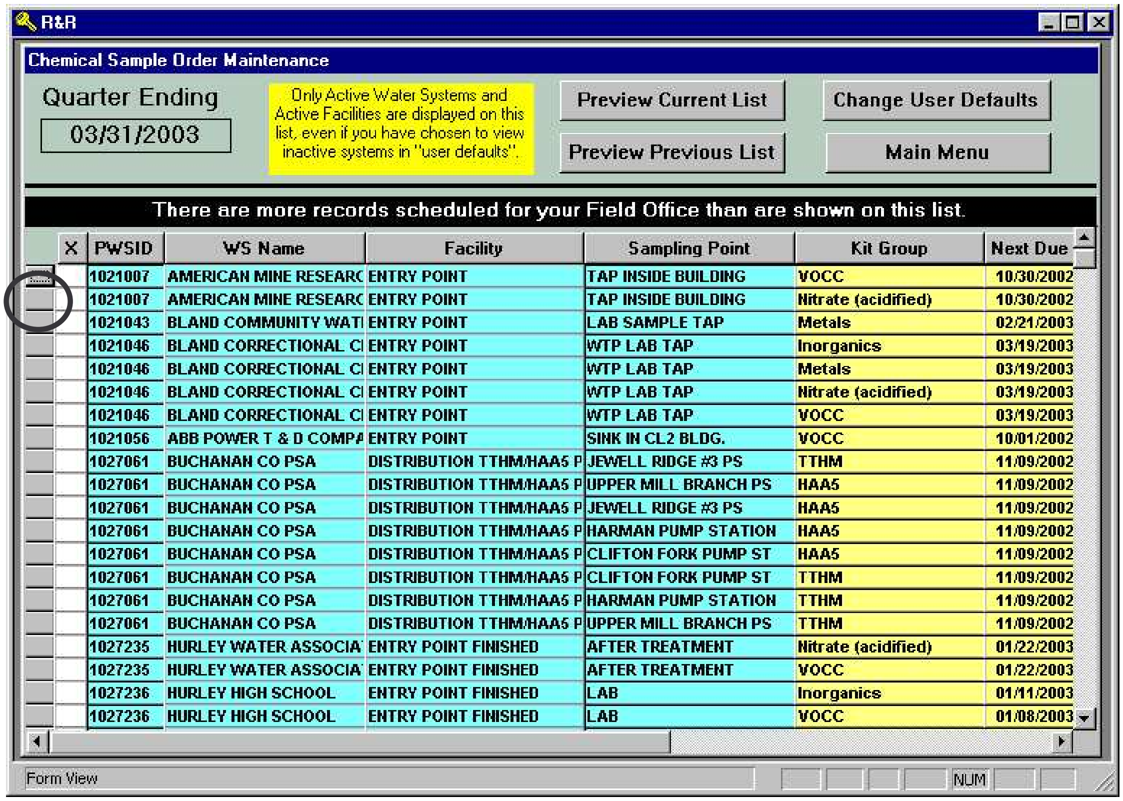
Radiological – Old Rule – if the Radiological group is selected, a check box is displayed so that the user can indicate that the sample is monitored under the “old rule”. This will not be necessary after December 8, 2003.

Fluoride Split – When the fluoride group and split sample type are selected, the chemical input form includes a section for waterworks analysis results.

Lead and Copper – Lead and Copper Type – When the lead & copper group is selected, an option box is displayed for the user to selected one of the following: At source, flushed, first draw, lead service line. Routine type samples are always “first draw” and can not be changed. The chemical input form includes a section for the resident to complete.

Individual “Lead” and “Copper” samples – If lead or copper are required to be tested individually, select “by analyte” and choose the “metals” group.

To edit a record, click the gray box to the complete left of the row to go to the edit schedule screen (see page 31).



The scheduler date range is set to coincide with the electronic submission to DCLS which is 60 days prior to the start of each quarter. The review period for each quarter is shown below (XX = current calendar year, YY = previous calendar year)

Monitoring Quarter	Quarter end date	available for review
1	3/31/XX	8/1/YY to 10/31/YY
2	6/30/XX	11/1/YY to 1/31/XX
3	9/30/XX	2/1/XX to 4/30/XX
4	12/31/XX	5/1/XX to 7/31/XX

For details on how scheduler determines what records to submit to DCLS, see page 33 and 34.

Quarter Ending – Displays the end date of the review quarter for which the displayed records are due. See the chart above to determine when each calendar quarter is available for review. This value can not be changed. To view records that are due outside of the review quarter, use the following reports:

District Reports: Next Chem Sample Due (Page 64)
Quick Look – Chemicals – Chemical Schedule "Next Sample Date" (Page 18).

Preview Current List– Preview of displayed list.

Preview Previous List– Preview of ALL records that were due the quarter prior to the review quarter and were submitted to DCLS. This report does not filter by user default settings.

Change User Defaults – See page 6.

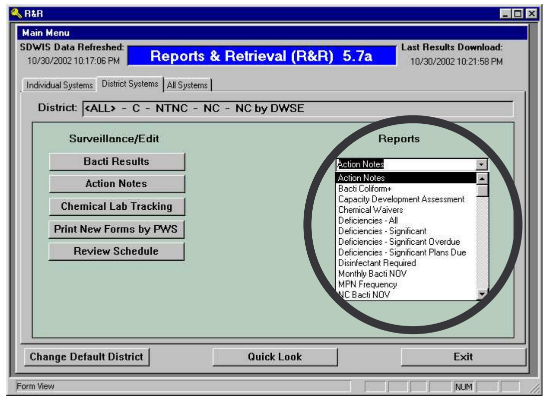
Hidden Records Warning Box– This warning box will display if there are records due in the review quarter for the default district that are not displayed on the list. For example, if a user has the default of District 01 – Community only, then the NC and NTNC systems will not be displayed on screen. **HOWEVER, they will still be submitted to DCLS**. Therefore, although the filtering options of the user default is helpful for managing the list, field personnel should make sure that they review the entire list before submission to DCLS. Select all system types (C, NTNC, NC, NC by D) on the user default selection to display all systems and remove the warning box.

Sort Buttons – Each column can be sorted by clicking the button on the column header. The sort order on screen is the same sort order for the previous and current list reports.

X – Exclude column. This column displays an "X" if the record has been excluded from the DCLS submission. See page 31 for instructions on this feature. Excluded records are displayed on the reports with a strike through to indicate that they were due but not ordered in that quarter.

III. District Systems ➔ Reports

Reports – District Systems Tab



The following reports can be selected from the Reports pick list. For reports that require it, a date range criteria will be displayed below the pick list.

Action Notes - Preview a report of all action notes entered on the System Data Screen (Page 24) or Action Notes screen (Page 56).

Bacti Coliform+ - Preview a report of all <u>positive</u> TC and/or FC results within the entered month.

Capacity Development Assessment - Preview a report of all systems grouped by those completed and not completed with totals and percentages. ONLY C and NTNC SYSTEMS ARE REPORTED!! This information is entered on the System Data Screen (See Page 24).

Chemical Waivers – Reports all Chemical Waivers entered via the **Chemical Schedules** button on the Individual Tab (See page 31).

Deficiencies – All - Reports all deficiencies entered into the Significant Deficiency module (Page 40). Sorts by source water type, corrected/uncorrected, PWSID, Deficiency.

Deficiencies – Significant - Reports all *significant* deficiencies entered into the Significant Deficiency module (Page 40). Sorts by source water type, corrected/uncorrected, PWSID, Deficiency.

Deficiencies - Significant Overdue - Reports all *significant* deficiencies entered into the Significant Deficiency module (Page 40) that have a *plan due date* prior to the current date. Sorts by city/county, PWSID, plan due date.

Deficiencies - Significant Plans Due - Reports all *significant* deficiencies entered into the Significant Deficiency module (Page 40) that have a *plan due date* in the user entered date range. Sorts by city/county, PWSID, plan due date.

Disinfection Required - Reports systems that have been flagged as requiring disinfection (Page 23).

Monthly Bacti NOV – Reports C and NTNC systems and TNC systems with a population greater than 1,000 that may be in violation due to failure to sample or MCL. The routine number of samples is generated based on population entered in SDWIS and the water regulations table OR the override number (See page 29). Only Sample Types "D" – Regular Distribution, "R" – Repeat Sample or "X" – Resample or sample type = blank, are counted toward compliance. **Results that have any other sample type or a reject reason, are not counted.**

MPN Frequency – Reports active systems and facilities that have an MPN frequency value on the Facilities Maintenance screen (see page 26).

NC Bacti NOV – Reports TNC systems with a population less than 1,000 that may be in violation due to failure to sample or MCL for a specific quarter. The routine number of samples is generated based on population entered in SDWIS and the water regulations table OR the override number (See page 29). Only Sample Types "D" – Regular Distribution, "R" – Repeat Sample or "X" – Resample or sample type = blank, are counted toward compliance. **Results that have any other sample type or a reject reason, are not counted.**

Next Chem Sample Due – Reports samples due based on the *Next Sample Date* entered on the Chem Schedules button of the Individual Tab (See Page 31). Extra due dates will be created if the frequency is less than the user entered date range. Example:

> Cubby's Water System – WL001 – SP1 is due to take a fluoride sample on 12/1/01. Fluoride has a 3 month sampling requirement. If the report is queried to display all samples due from today (assumed 12/1/01) until 11/30/**02** (user entry), then Cubby's SP1 will have samples due on 12/1/01, 3/1/02, 6/1/02, 9/1/02. Even though there is only ONE actual fluoride record (12/1/01) in the Chem schedule module, the report will display future calculated samples due.

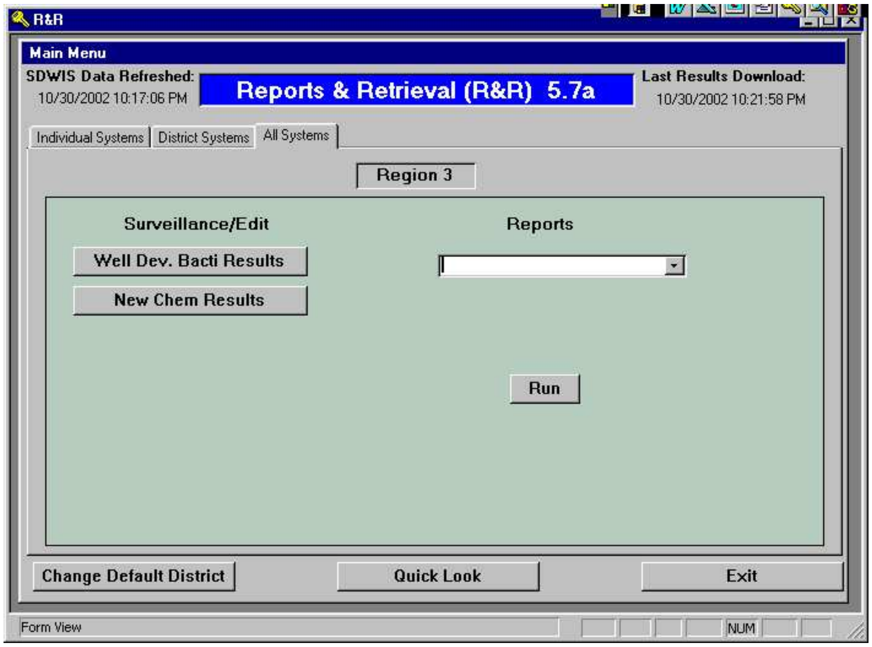
Next Inspection – Generates a report of all inspections due within the entered date range. Next Inspections are entered through the **Inspections** button on the Individual Tab of the Main Menu (See Page 38). Contact information is selected on the Contacts screen (Page 28) **or** the System Data Screen (Page 24).). Extra due dates will be created if the frequency is less than the user entered date range. Example:

> Cubby's Water System is due for inspection 12/1/01. They have a 3 month inspection frequency. If the report is queried to display all inspections due from today (assumed 12/1/01) until 11/30/**02** (user entry), then Cubby's will have inspections due on 12/1/01, 3/1/02, 6/1/02, 9/1/02. Even though there is only ONE actual next inspection due date (12/1/01) in the Inspections module, the report will display future calculated inspections due.

Source Water Assessment - Preview a report of active systems that have active sources (facility types: WL, IN, SP) grouped by those completed and not completed with totals and percentages. This information is entered on the System Data Screen (See Page 24).

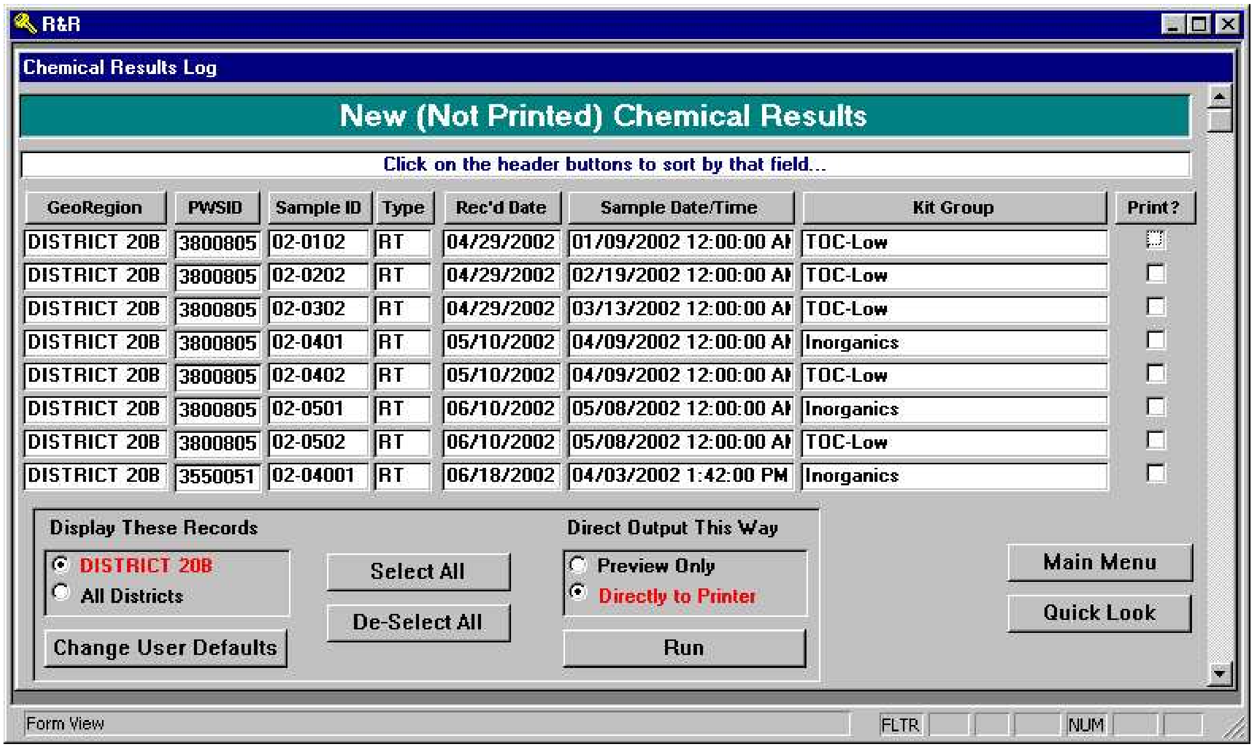
System Data Dates - Preview a report of all dates entered on the System Data Screen (See Page 24).

IV. All Systems → Well Dev. Bacti Results

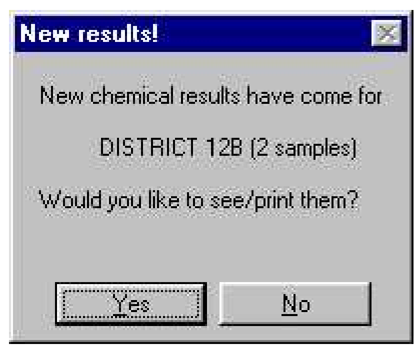


Well Dev. Bacti Results. Displays for editing bacti results for the "million series" PWSID that is used as a generic number for new well development samples. See page 30 for editing instructions.

New (Not Printed) Chemical Results. This module displays all results received from SDWIS that have not been printed in an owner report.



This screen can also be accessed when R&R is first loaded and the user is notified that new results are available.



Records can be sorted by clicking the button on the header of each column.

Print?: The last column of the list and the only one that is editable. Select records to print by clicking in the box to place a check mark. A second click will remove the check mark. To select all records in the list click the *Select All* button.

Display These Records: Records can be filtered by using the toggle button to display the user's default district or all districts.

Change User Defaults: See page 6.

Select All: Places a check mark in all *Print?* boxes in the list for batch printing.

De-Select All: Removes check marks in all *Print?* boxes.

Direct Output This Way:

Preview Only: Displays in preview the summary report and individual Owner Reports for each record selected by a check mark. Printing to a printer from this screen is not permitted.

Directly to Printer: Sends to the default printer, the summary report and individual Owner Reports for each record selected by a check mark. The confirmation box below will appear after the reports are sent to the printer.

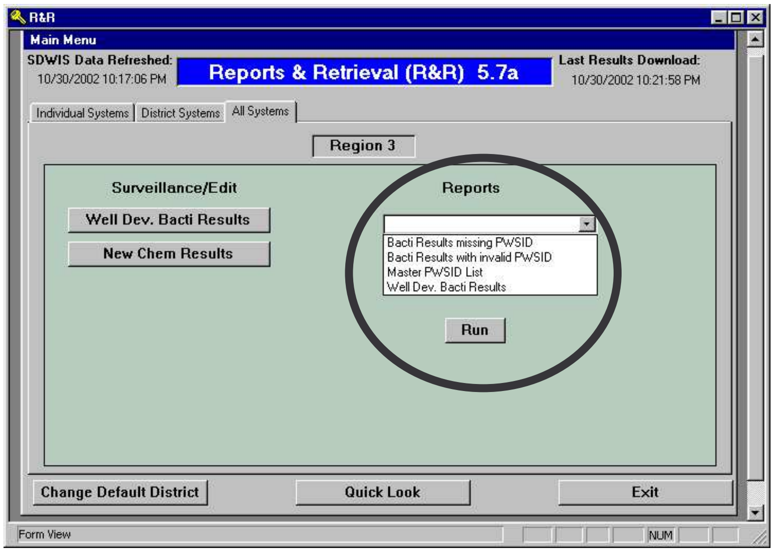
Make sure to collect all pages from the printer before acknowledging this confirmation. Clicking OK will remove the printed records from the "New Chem Results" screen. Cancel will return the user to the "New Chem Results" screen without removing the printed records from the list.

An owner report can be generated for an individual PWSID at any time from the Chemical Scheduler – SDWIS History button (Page 35).

90^{th} Percentile: If the facility is a distribution system and has Lead & Copper samples, a 90^{th} percentile report will be generated after closing the owner report.

If 90th percentile is between two samples, they are both bolded and their average is used. This report can also be generated from Quick Look (Page 14).

IV. All Systems ➔ Reports



Bacti Results missing PWSID - Shows results received electronically from the labs which do not have a PWSID number.

Bacti Results with invalid PWSID - Shows results received electronically from the labs which do not have a matching PWSID number in SDWIS.

Master PWSID List - Displays a report of ALL systems in the region. The chief use of this query is to obtain a list of all USED PWSID numbers. Therefore HISTORIC (“deleted”) systems also display on this list. If the system is Historic, a “YES” will appear in the Historic column.

Well Dev. Bacti Results - Previews a report of all bacti results for “million series” New Well Development samples (identified by PWSID x000000 where “x” is your field office number).

Appendix A

These instructions are provided for the purpose of using system and address information generated from R&R in MS Excel or MS Word.

<u>MAIL MERGE</u>- Merging a main document to your data file

Creating a mail merge document using the data from your report involves merging a main document with a data source. In this case, your data source will be the criteria chosen in from the Quick Look Screen. Your main document can be **form letters, mailing labels, envelopes, or catalogs.** You will need to: (1) Export this data into an Excel (XL) file, and (2) Import the Excel data into MS Word. A main document contains the text and other items that remain the same in each letter. A data source contains the information that changes in each letter, such as the name and address of each recipient. Merge fields, which you insert into the main document, instruct Word where to print information from the data source (the report generation file). When you merge the documents, Word replaces merge fields with information from the data source. Each row of information from the data source produces a unique version of the form letter.

1. EXPORTING

1.Select the desired criteria from the Systems or Legal Entities Tabs on the Quick Look Screen.
2.Preview the list by clicking the 'LE Report" button located on the Legal Entities screen.
3.Click the "XL" button on the print preview toolbar (located in the upper left hand corner). This step creates the Excel(XL) file.

When the "output to" screen appears:

1. Choose the desired drive, and directory, and enter a file name for the exported file. NOTE: REMEMBER WHERE YOU ARE PLACING THIS FILE, AND WHAT YOU ARE NAMING IT. YOU WILL NEED TO FIND IT WHEN IMPORTING THE DATA IN MS WORD.

When the system has completed generating this file:

2. Click the blue door on the toolbar, (this will return you to the report screen,)Click Main Menu, and then "Exit"

2. IMPORTING REPORT DATA IN MS WORD

First, open Microsoft Word, and the document you want to use as the main document. You can open an existing letter, base a new letter on a letter template, or use the active document window<u>. Make sure that</u> <u>the data source is not the active document</u>.

A. Click **"Tools"**, and click "**Mail Merge**."
B. Under **#1 Main Document**, choose the **Create** button.

You may then select your main document from the following:

Form letters
Mailing labels
Envelopes
Catalog

C. After you have selected your main document Word displays a message, choose the **Active Window button.**

You will then need to supply the names, addresses, and other information to be merged with the main document.

D. In the Mail Merge Helper Dialog box, under data source, choose the **Get Data, and Open Data Source** button, if using your previously created Excel file from Report Generator.

1. Select the **MS EXEL WORKSHEETS** option in the **Files of Type** box
2. Select the **Drive, Directory,** and the Excel (XL) file created in step 1 of “Exporting.”
3. Click “Open”
4. Click “OK” for Entire Worksheet

Once you’ve opened an existing data source (your Excel file), you can complete the main document by adding merge fields where you want each category of addressee information to be printed.

E. Word will then display Edit Main Document for form letters, or Set Up Main Document for Labels or Envelopes, Click the appropriate bar.

If Labels are being created: A Label Options screen will appear. Choose the proper settings for Label Product, number, size and printer information.

If Envelopes are being created: An Envelope option screen will appear. Choose the appropriate size, fonts, and printer information.

3. TO INSERT MERGE FIELDS INTO THE MAIN DOCUMENT

Field names are inserted as merge fields, and displayed within chevrons. Example: (<<salutation>>).

A. Each time you come to a place where you want to insert information from the data source, click the **Insert Merge Field** button on the Mail Merge Toolbar, and then choose the appropriate merge field. **<u>MAKE SURE THAT YOU TYPE ANY SPACES OR PUNCTUATION YOU WANT BETWEEN TWO MERGE FIELDS OR AFTER A MERGE FIELD.</u>** YOU CANNOT TYPE A MERGE FIELD DIRECTLY INTO A DOCUMENT.

B. When you finish editing the main document, choose **Save** from the File menu.

C. Click Tools, Mail Merge, and #3 Merge. Click Merge again when Windows displays the next Merge screen. Your document is now complete, and may be printed.

Appendix A

There are currently 13 fields exported from SDWIS to use for mail merges. More will be added as required.

These fields are specific to INDIVIDUAL type Legal Entities.

<<Salutation>>	Mr., Mrs., Ms.
<<Fname>>	First name
<<Lname>>	Last Name
<<Title>>	Job Title

If the Legal Entity is an INDIVIDUAL, the Organization is used in the following field. For all other types, it is the Name of the Corporation, Company, Government Agency, etc.

<<Comp>>	Company

The following fields are exported for ALL Legal Entity Types:

<<Addr1>>	Address Line 1
<<Addr2>>	Address Line 2
<<City>>	City
<<State>>	State Abbreviation
<<Zip>>	Zip code (xxxxx-xxxx)

<<PWSID>>	The PWSID
<<PWSIDName>>	Name of the Public Water System
<<City/County>>	The primary region identified in SDWIS

Appendix B

January 3, 2001

Page 63 - Added description of new report - MPN Required
Page 72 - Added Appendix B - User's Manual Revision History
Changed footer and cover page to reflect current R&R version 5.2.

November 14, 2002
Changed footer and cover page to reflect current R&R version 5.7.
WM Page 1 – Added Chem Schedules and Print New Forms by PWS as mandatory modules.
Removed instructions for Violations Tracking. This module has been replaced by SDWIS.

Page 6 – Modified instructions for "Change Default District" new functionality
Page 13 - Removed Instructions regarding R&R Link Status on Quick Look Facilities. This feature has been removed from R&R.
Page 17 – Added instructions for new features and reports of Quick Look Chemicals criteria selection screen.
Page 20 – Added instructions for new features and reports of Quick Look H2O Production criteria selection screen
Page 21 – Added instructions for new features and reports of Quick Look Disinfection By Products (DBP) criteria selection screen
Page 23 – Added explanation of new fields: Primary Pop, Total Pop, Disinfection Residual Required, and primary contact display. Removed GWUDISW Date field. This field is now found on the facility screen.
Page 25 – Added instructions for new Water Production Module.
Page 26 – Facilities – Removed instructions for "adding" a facility into R&R. This feature has been removed. Removed instructions for flagging a facility as an entry point. Added clarification of other fields. Indicated mandatory fields.
Page 30 – Bacti Results – Changed text to match program – preview report show results dated back TWO years.
Page 31 – Chemical Schedules – Instructions added for this new module.
Page 40 – Deficiencies – Instructions added for this new module.
Page 48 – Added instructions for new DBP module.
Page 53 – Instructions to use Ad Hoc application for New Well Dev. Forms.
Page 54 – Individual System Reports – Added description of new Chem Schedule report.
Page 55 – Removed information that bacti results are unique by Sample ID.
Page 57 – Modified instructions for Samples At Lab module.
Page 58 – Added instructions Print Forms by PWS.
Page 61 – Added instructions for Review Schedule
Page 63 – Added descriptions for new/modified District Reports: MPN Frequency, Next Chem Sample Due, Chemical Waivers, Next Inspection, Disinfectant Required.
Changed description of Bacti NOV and NC NOV reports for new TNC criteria.
Page 66 – Added instructions for using New (Not Printed) Chemical Results Module
Removed instructions for discontinued feature to print New Well Dev. Forms.
Page 73 – Appendix C - Quick Reference Guide

January 2, 2003
Changed footer and cover page to reflect current R&R version 5.7b.
Page 16 – Explained changes in report data based on SDWS 8.0 Violation Period.
Page 37 – Removed limitation that R&R scheduler updates for Fluoride split compliance. Scheduler updates for any fluoride split result.
Page 59 – Added further explanation for generating forms by PWS.

<u>Bacti</u>

Data stored in R&R

Data stored in SDWIS – See WM 823 for instructions on:

Alt. State. Field – required to prevent routine samples from being ordered from DCLS

Population – required to calculate # of samples

Sampler Contact – required for mailing kits

DCLS procedures

Routine PA and MPN monthly/quarterly samples are ordered from DCLS electronically 60 days prior to the begin date of each calendar quarter.

Monitoring Quarter	Ordered
1	Nov. 1
2	Feb. 1
3	May 1
4	August 1

Annual MPN samples are ordered May 1, so that waterworks have kits by 3rd quarter.

To order routine PA sample kits from DCLS, make sure system has correct classification data in SDWIS (population, type, activity status).

To order routine MPN sample kits from DCLS, enter the sampling frequency in the R&R facilities module 26

To prevent routine PA and MPN sample kits from being ordered from DCLS, place an "N" in the SDWIS Alt. State Field.

To order routine MPN sample kits from DCLS, but not routine PA sample kits:

1. place an "N" in the SDWIS Alt. State. Field
2. Check the box "Send MPN Schedule to DCLS" in the R&R Facilities module 26

To order special bacti forms not included in quarterly routine orders to DCLS, generate the forms from the R&R Bacti Forms Module .... 53 or from the "Ad Hoc" application.

To order New Well Development samples, use the R&R Chem Form by PWS module to generate a kit order form. 58

Bacti (Continued)

<u>Chemical (Continued)</u>

DCLS procedures

Routine samples are ordered from DCLS electronically 60 days prior to the begin date of each calendar quarter.

Monitoring Quarter	Ordered
1	Nov. 1
2	Feb. 1
3	May 1
4	August 1

Chemical (Continued)

Appendix C – Quick Reference

Data Transfer

The following information is received from the Central Office during the bacti download procedure:
- Electronic Bacteriological results from state and participating private labs
- Updates to staff table information
- Updates to Bacti Method Types/Codes
- Updates to DCLS kit groups

The following information is sent to the Central Office during the bacti download procedure:

Appendix C – Quick Reference

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